

CITY AND COUNTY OF BRISTOL



THE
HEALTH OF BRISTOL
IN
1959

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Medical Officer of Health

THE HEALTH OF BRISTOL IN 1959

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GENERAL REVIEW OF THE HEALTH OF BRISTOL 1959

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ANNUAL REPORT 1959

My Lord Mayor, Ladies and Gentlemen,

I have the honour to present my fourth Annual Report on the health of the City of Bristol for the year 1959.

The various aspects of the work are dealt with in detail in the different sections of the report but this preamble directs attention to some of the more important events or developments during the year.

Financial restrictions continued to slow down capital projects and the only new major building activity pursued during the year has been the provision of an additional clinic to serve the Bishopsworth/Withywood Estate. It is anticipated that this clinic will be opened in 1960.

Vital Statistics

The population has declined each year since 1954 when it reached its highest total of 444,900; there was a further decline in 1959 of 1,400 people and the mid-year population was 436,600. The reason for this decline has been the housing of over-spill population in adjacent areas.

There was a slight increase in the number of persons married, from 6,426 last year to 6,668, giving a marriage rate of 15.3 persons married per thousand population compared with 14.67 in 1958.

There were 315 fewer births to Bristolians in 1959—6,663 compared with 6,978; this gives a crude birth rate of 15.26 per thousand population which is below that for England and Wales.

Our records show that the percentage of non-Bristolian live births registered in the City has risen each year from 12.2 per cent in 1950 to 22.2 per cent in 1959; this is due to the admission, on an increasing scale, of non-Bristolian maternity cases into Bristol maternity units. In the absence of any additional beds in the City and any falling off in the proportion of Bristol mothers confined in hospital, this has meant discharging more and more mothers from hospital at an earlier stage; in fact, in 1959, 12 per cent of Bristol mothers were discharged from Bristol hospitals within five days of having had their babies. This policy being pursued by the hospital authorities has had inevitable repercussions on your domiciliary midwifery service which has been hard pressed throughout the year.

It is true to say however that there is no evidence that early discharge has had any detrimental effect on either mother or baby and in fact may be an advantage when maternity units tend to become too overcrowded. In recent years there have been tremendous improvements in the housing of the population so that backed by efficient services of home helps, domiciliary midwives, family doctors and obstetric "flying squads", the business of having babies at home or of being sent home early from hospital is not so hazardous as it might have been in the immediate post-war years. About 74 per cent of Bristol mothers are confined in hospitals or nursing homes compared with 64.5 per cent on average for England and Wales.

Once again 4.8 per cent of the total credited live births were illegitimate. This seems to be an irreducible peace-time minimum. Although many families nowadays are socially, morally and psychologically more prepared to cope with and absorb their own particular problems, a high level of employment, particularly of married women, has sustained the need for welfare services for the unmarried mother. The illegitimate infant mortality rate is still higher than that for legitimate babies.

In 1959 there were 5,174 deaths in Bristolians giving an adjusted death rate of 11.49 per thousand compared with 11.09 per thousand in 1958. The principal causes of death remain:—

(1) Diseases of the heart and circulatory system—about 40 per cent ; that is, somewhat higher than the proportion in England and Wales.

(2) Cancers, including leukaemia—about 19 per cent; that is, somewhat under $\frac{1}{5}$ of all the causes of death compared with $\frac{1}{6}$ for England and Wales.

(3) Vascular lesions of the nervous system—about 16 per cent; that is, about $\frac{1}{6}$ compared with $\frac{1}{7}$ for England for England and Wales.

(4) Respiratory diseases—accounting for about 10 per cent of all deaths.

Diseases of the heart and circulatory system and vascular lesions of the nervous system therefore account for over one-half of all the deaths and as the Chief Medical Officer for England and Wales has stated, bearing out the truth of the maxim, “a man is as old as his arteries”. As in previous years about half of all Bristol deaths occur in hospitals and about 45 per cent at home.

Deaths are minimal from ages 1 to 15 years (about 1 per cent of all the deaths) and the stage has now been reached when the increased expectation of life which this City has enjoyed during this Century will not improve until means are found of preventing cancers and heart diseases or of making major advances in their treatment.

Diseases of the circulatory system and the cancers show their heaviest incidence in ageing and aged persons; they often manifest themselves for the first time in middle life and 44 per cent of all deaths from cancers and 26 per cent of the deaths from circulatory disease occur in the middle age groups before retirement. As some of the circulatory diseases at least are thought to be associated with stress factors, it would perhaps be salutary if society began to turn its thoughts to what can be done for a middle-aged man and wife who are carrying the heat and burden of the day. In recent decades some of the reverence for childhood and the glorification of old age has rightly been reflected in a spate of social legislation. But in concentrating our attention on these two age groups do not let us neglect the middle age group. Perhaps they too deserve their Charter! Nothing can be more tragic than the striking down of the bread winner from coronary artery disease while in the prime of life or the mother (the pivotal point in the home) from cancer of the breast or vascular lesion of the nervous system. Until science and medicine can discover ways and means of preventing or treating these conditions, society has a clear duty to give all possible support to middle age through its health and welfare services.

There were 130 deaths of infants under the age of one year in Bristol during the year giving an infant mortality rate of 19.5 per thousand live births. This is an improvement on 1958 when the rate was 20.64 per thousand live births.

The infant mortality rate in Bristol has remained at this figure, a little more, or a little less, throughout the whole of the 1950's. There is no doubt that for a big industrial City this is quite a good record and Bristol's infant mortality rate is still some 2 to 3 points better than that for England and Wales. But the fact that it hasn't moved very much for the past decade should prompt us to have an even closer look at the whole of this sector of the health services in the City. We know that we are approaching the hard core of saveable infant lives but experience in other countries would suggest that further improvements are possible perhaps to the extent of saving another 30 Bristol infant lives a year. We have undoubtedly reached the stage where each infant death and each stillbirth will need to be scrutinised more closely in association with our hospital and family doctor colleagues.

Nearly 72 per cent of infants dying in their first year of life did so in the first 28 days of life; that is, the neo-natal death rate for 1959 was 14 per thousand compared with 14.47 per thousand in 1958. About 47 per cent of those babies die in the first day of life some of them from conditions incompatible with continued life. Fashions and improvements in the diagnosis of the cause of death in this group can produce apparent inconsistencies in the annual statistics but it is disturbing to note that the proportion of deaths attributed to birth injury has increased from 11 per cent to 25 per cent.

In 1958 we recorded a stillbirth rate of 17.18 per thousand, the lowest rate ever recorded. In 1959 this rate has increased to 19.7 although this is still lower than the last available figure for England and Wales which was approximately 21.0.

During the year there were 216 peri-natal deaths; that is, stillbirths plus deaths in the first week of life giving a peri-natal mortality rate of 31.8 per thousand and the results of the 1958 National Birthday Trust Enquiry into peri-natal deaths are awaited with great interest.

It is regrettable that two mothers lost their lives in childbirth in 1959. After full assessment it was considered that although the deaths were associated with complications of delivery, neither could have been prevented.

It was a quiet year from the point of view of notifiable infections and apart from the usual biennial measles epidemic infectious diseases were at a comparatively low ebb.

There was no large scale outbreak of influenza; for the tenth consecutive year there was no case of diphtheria; scarlet fever notifications were the lowest ever recorded; poliomyelitis cases were few in number; no case of whooping cough proved fatal and dysentery notifications were only about one-third of those recorded in 1958.

Nevertheless the Bristol child population is not receiving the protection by vaccination against smallpox and immunisation against diphtheria and whooping cough which is necessary to keep these diseases from once again becoming killers and maimers. We hope that our Spring offensive which is planned for next year will stimulate Bristol mothers and fathers to remedy this state of affairs.

There have been further falls in the number of notifications and deaths from pulmonary tuberculosis so that once again we have achieved record low figures; in 1959 the death rate for respiratory tuberculosis was down to .062 per thousand of the population. Modern therapy, B.C.G. vaccination, radiography, improved housing and nutrition have all played their part in producing this result. The need now is to step up case finding procedures for the infectious cases with a view to earlier treatment. The emergence of antibiotic resistant strains of Tubercle Bacilli is sufficient warning that this disease has not yet been vanquished.

On orthodox vital statistical information it would therefore appear that the state of public health in Bristol has been well maintained and marginal gains have been made here and there. That further improvement is necessary and possible is undeniable. To the economist the growing expenditure on the health services each year may appear at present to be subject to the law of diminishing returns but he must not lose sight of the fact that without a population in good health all his efforts to step up production and improve the standard of living will be vitiated.

As yet we have only indirect methods of estimating the volume of morbidity in the community, particularly morbidity which is affecting the middle aged groups of the population. Many of these conditions lead to prolonged disability, suffering and economic loss to the life of the City. If we apply to the City of Bristol the results of recent morbidity studies in general practice, it is probable that:—

29,000 persons consult the family doctor at least once a year for neuroses;

28,000 consult for arthritis and rheumatism;

27,000 at least once for bronchitis;

5,000 for diseases of the circulatory system, and, over—

2,000 at least once a year for a malignancy.

In the absence of knowledge of the specific causation of these conditions it is difficult to formulate specific health policies which will prevent their occurrence but even without this complete knowledge much is being done and can be done to minimise their effects. In carrying out this task one cannot say it is the job of any one section of the health service, all must play their part, but not least the Local Health Authority. One of the major problems of today is to know how to co-ordinate all the different activities in the most useful fashion.

Maternal and Child Health

Reference has already been made to some of the problems of maternal and child health under the heading relating to Vital Statistics.

Here, I would draw attention to the steadily improving relationships between Local Health Authority personnel and general medical practitioners in the sphere of antenatal care and to the new arrangements at Southmead Clinic to facilitate the teaching of midwives and medical students.

In recent years the recruitment of domiciliary midwives has become increasingly difficult and in an endeavour to improve the situation steps were taken during the year for the Local Health Authority to have its own Part II S.C.M. training scheme, such training being undertaken entirely "on the district". We also believe that domiciliary midwifery could be made more attractive by making arrangements to give midwives more night relief and a night rota plan was approved by the Health Committee to come into operation early in 1960.

Reference is made in the report to the new health visitor training course, which has now been reorganised and lasts a full academic year and to the subsequent improvement in the recruitment of pupils both quantitatively and qualitatively.

Work relating to the early ascertainment and management of deafness in young children is described in the report by Dr. Helen Gibb. There can be little doubt that this is a service of growing importance which needs to be expanded to cover the "special risk" groups but there are present difficulties in recruiting skilled staff.

In September of this year, Dr. Alison Craig, First Assistant Medical Officer in Maternal and Child Health, retired after twenty-eight years of devoted service. She will be greatly missed by all the mothers, children and colleagues to all of whom she endeared herself.

Mental Health

In the sphere of mental health, 1959 has been a notable year which will mark another milestone in the nation's progress towards a more enlightened

approach to the problem of mental illness. The *Mental Health Act*, 1959 received Royal Assent and its various sections will come into operation by appointed day orders. The intention of the Act is, however, clear; the treatment of mental sickness will be brought into line as far as possible with the treatment of physical illness and the centre of gravity of the mental health services will move from the hospital bed to the out-patient department, the day hospital and to the community. The implications from the point of view of Local Health Authority responsibilities and financial commitments will be very considerable. In Bristol, the City Council has already approved the provision of a new training and industrial centre for mental defectives and the old occupation centre will ultimately be converted into a hostel for adult defectives. The new centre will probably be the biggest in the country, providing accommodation for 390 children and adults and will include a special care unit for 40 children suffering from multiple handicaps.

But the implementation of all the provisions of the Act can only be carried out successfully provided that people are prepared to accept the personal consequences and the need to co-operate. Last year we had the lamentable spectacle of out-spoken public opposition in two areas of the City to the provision of a hostel for adult mental defectives. There can be little doubt as to the need to educate public opinion in the problems of mental ill-health and in this matter the film "Marlborough House" to which detailed reference is made in the Report, and which has been shown to many audiences in the City, has had a considerable beneficial effect. Open days at hospitals for the mentally ill, and the efforts of voluntary organisations such as the Marlborough House Parent-Teacher Association and the Bristol Society for the Mentally Handicapped are also playing a valuable role in this educational process.

The Mental Health Act, 1959 makes no provision for attempting to deal with the primary prevention of mental ill-health and yet this is the sphere of action where the Local Health Authority should be seeking ways and means of fulfilling its traditional role. In Bristol, this aspect of the problem has not been overlooked. For the past two years an anticipatory guidance service has been developed, with as its primary objective the treatment of pre-school children suffering from early symptoms of emotional disturbance. During 1959 the desirability of integrating this service with that given at the orthodox Child Guidance Clinic for school children (in existence for the past 25 years) became more and more apparent. This integration was agreed upon by the Health and Education Committees and towards the end of the year the Child and Family Guidance Service, as it is now known, came into existence. This advisory service to parents, staffed by consultant psychiatrists, psychiatric social workers and psychologists is now being "peripheralised" with bases at the maternity and child health clinics. In this way health visitors and public health doctors are being given a better opportunity of re-orientating their approach to child and family health problems. The aim is to build up six teams covering six different areas of the City. It is too early yet to say how effective this service has been or will be in the future; it is essentially an experimental approach to the problem of prevention but difficulties of staff recruitment, particularly of psychiatric social workers, will slow down progress.

City Health Department—University of Bristol Relationships

The Department of Preventive Medicine in the University of Bristol was formed some twenty-five years ago, built on the twin pillars of chemistry and bacteriology and with the Medical Officer of Health also acting as part-time professor of preventive medicine. Bacteriology long ago became a scientific

discipline in its own right with its own Department and Professorial Head. The chemical section of the Department, was, and still is, mainly concerned with the analysis of foods and drugs under the professional direction of the City Analyst. By mutual agreement between the City and the University the chemical section is no longer considered to be a University function and will therefore revert to the full control of the City as from 1st January, 1960. The new University Department of Public Health is being rebuilt around a Statistical Unit for research and service purposes as this forms one of the main tools in the investigation of modern public health problems. The Chemical section has been renamed as the Scientific Branch of the Public Health Department and the City Analyst will be the Scientific Adviser to the Local Authority.

It is with pleasure that I record my thanks for the support and guidance I have received from the Chairman, the Vice-Chairman, members of the Health Committee and the City Council. My sincere thanks are also given to the Town Clerk and the other Chief Officers of the Corporation for their ever willing help and advice. Once again I would like to place on record my acknowledged gratitude and indebtedness to an enthusiastic, hard working and loyal staff.

I am,

Your obedient servant,

R. C. WOFINDEN,

Medical Officer of Health.

THE HEALTH COMMITTEE 1959

Chairman:

Alderman J. J. MILTON, O.B.E., J.P.

Vice-Chairman:

Mr. W. H. ENGLAND

Aldermen:

Mrs. A. E. NUTT

G. P. C. FORD

Councillors:

Mrs. H. BLOOM

W. A. BUSH

Mrs. A. M. CHAMBERLAIN

W. W. CLOTHIER

K. I. CRAWFORD

B. J. M. DAVIES

J. D. FISK

S. T. GAMLIN

Mrs. P. M. JACOB

Mrs. B. MERCHANT

H. J. G. SKEATES

A. E. C. TUDBALL

PUBLIC HEALTH STAFF, 1959

Medical Officer of Health (City, Port and Schools): R. C. WOFINDEN, M.D., B.S., D.P.H., D.P.A.

Deputy Medical Officer of Health: P. G. ROADS, M.D., B.S., D.P.H. (*Resigned* 31.7.1959).

J. F. SKONE, M.D., B.S., D.C.H., D.P.H., D.I.H. (commenced 1.10.1959).

Principal Assistants

Chief Assistant Medical Officer of Health and Senior Medical Officer for Mental Health: H. TEMPLE PHILLIPS, M.D., B.S., D.I.H., D.C.H., D.P.H.

Senior Medical Officer—Port: D. T. RICHARDS, M.R.C.S., L.R.C.P., D.P.H.

Senior Medical Officer—School Health Service: A. L. SMALLWOOD, M.D., CH.B., D.C.H., D.P.H.

Senior Medical Officer—Maternal and Child Welfare: SARAH C. B. WALKER, M.D., B.S., D.P.H.

Senior Medical Officer—Epidemiology: P. W. BOTHWELL., M.B., CH.B., D.P.H. (commenced 3.2.1959)

Senior Dental Officer: J. McCaig, L.D.S., R.F.P.S.

Chief Public Health Inspector: F. J. REDSTONE, F.R.S.H., F.A.P.H.I.

Chief Administrative Officer: P. J. ROOM.

Chief Nursing Officer: Miss L. M. BENDALL, S.R.N., S.C.M., H.V.CERT.

Technical Officers

Health Education Officer: P. MACKINTOSH, B.A.

Medical Records Officer: Miss E. H. L. DUNCAN, M.A., B.SC.

Nutritionist: Miss M. CHAPMAN.

Consultant Bacteriologist

Professor K. E. COOPER, B.SC., PH.D., M.R.C.S., L.R.C.P., A.I.C.

Deputy Consultant Bacteriologist

H. R. CAYTON, M.B., CH.B.

Public Analyst

E. G. WHITTLE, B.SC., F.R.I.C.

SUMMARY OF VITAL STATISTICS

Population

The Registrar General has estimated the home population (including H.M. Forces stationed in the area) at mid-year 1959 to be 436,600, a decrease of 1,400 from that for the previous year. The rates for 1959 are based upon this estimated figure.

The figures given in the following tables for births, stillbirths, and deaths (but not marriages) are those allocated by the Registrar General to Bristol as registered during the respective years and corrected for inward and outward transfers according to residence.

	1959	1958
Estimated home population (mid-year)	436,600	438,000
Marriages	3,334	3,213
Rate (persons married) per 1,000 population ..	15.3	14.67
Births registered during year	6,663	6,978
Rate per 1,000 population	15.26	15.93
Rate per 1,000 population adjusted (ACF. 1959 1.00)	15.26	15.93
Stillbirths registered during year	134	122
Rate per 1,000 total births	19.71	17.18
Deaths registered during year	5,174	5,227
Crude rate per 1,000 population	11.85	11.93
Adjusted rate per 1,000 population (ACF. 1959 0.97)	11.49	11.09
Natural increase (per 1,000 population)	3.41	4.00
Deaths under one year registered during year ..	130	144
Rate per 1,000 live births registered during year	19.5	20.64
Deaths under four weeks registered during year ..	93	101
Rate per 1,000 live births registered during year	14.0	14.47
Peri-natal mortality (Still births plus 1st week deaths)	216	206
Rate per 1,000 total (Live and Still) births ..	31.8	29.0
Deaths from puerperal causes registered during year	2	2
Rate per 1,000 total births registered during year	0.29	0.28

Marriages

	<i>Number of marriages during year</i>	<i>Rate persons married per 1,000 popn.</i>
1959	3,334	15.3
1958	3,213	14.67
1957	3,446	15.68
1956	3,581	16.26
1955	3,535	15.98
1954	3,377	15.18
1953	3,460	15.58
1952	3,585	16.15
1951	3,506	15.88
1950	3,512	15.87
1949	3,783	17.20
1948	3,786	17.41

Births

	1950	1951	1952	1953	Year 1954	1955	1956	1957	1958	1959
R.G.'s figures:—										
Registered live births (Bristol citizens)	7,096	6,872	6,760	6,945	6,691	6,531	6,669	6,984	6,978	6,663
Birth rate per 1,000 pop.	16.03	15.56	15.23	15.63	15.04	14.76	15.14	15.89	15.93	15.26
Live births notified in Bristol during the year	7,897	7,511	7,557	7,781	7,641	7,469	7,785	8,324	8,580	8,265
(Births are notified in the district where they occur)										
Non-citizens included above ..	727	844	900	917	1,060	1,129	1,259	1,429	1,587	1,671

Illegitimacy (Rate: 48 per 1,000 live births registered during year).

	1959	1958
Registrar General's total—		
Illegitimate live births (corrected for residence)	322	336
Illegitimate live births as percentage of total (corrected) live births	4.8	4.8

Stillbirths Total No. (corrected by R.G. for residence) registered during 1959—134 (1958—122). Rate: 19.7 per 1,000 total births registered.

Deaths Rate: (Crude) 11.85 per 1,000 population.
(Adjusted) 11.49 per 1,000 population (Area Comparability Factor 0.97).

During 1959 the total number of deaths actually occurring in Bristol within the year was 5,753 of which 885 were non-citizens. The number of inward transfers in respect of citizens who died outside the City area was 310.

The Registrar General's corrected figure for deaths of Bristol citizens registered during 1959 is 5,174 and the crude death rate is 11.85 per 1,000 population. Comparable figures of the Registrar General for 1958—5,227 deaths and the rate—11.93.

Natural Increase Rate: 3.41 per 1,000 population.

	1958	1959
Bristol births registered during year	6,978	6,663
Bristol deaths registered during year	5,227	5,174
Natural increase	+1,751	+1,489

Infant Mortality (Rate: 20).

Total deaths of Bristol citizens under 1 year of age registered during 1959	130
Rate per 1,000 registered live births (Bristol citizens)	19.5
	1959 1958 1957 1956 1955 1954 1953 1952 1951 1950
Legitimate infant mortality rate per 1,000 legitimate live births reg. in the year ..	18.9 20.3 18.1 19.6 18.9 20.7 22.3 20.9 20.2 23.0
Illegitimate I.M. rate per 1,000 illegitimate L.B. registered in the year	31.1 26.8 23.9 13.7 24.6 22.0 12.9 33.1 24.8 29.0

Neo-Natal Deaths (*i.e.*, deaths under four weeks of age).

Total deaths of Bristol citizens in this age-group, registered during 1959.. 93
Rate per 1,000 registered live births (Bristol citizens) 14.0

During 1959 the deaths of 93 babies during the first four weeks of life were registered (Bristol citizens). (Comparable figure for the year 1958 is 101).

These deaths represent 72 per cent of the total infants (Bristol citizens) dying under one year of age (70 per cent in 1958).

In 1959, 44 of these deaths occurred on the first day and 39 in the remainder of the first week.

For 1959, of the total of 93 neo-natal deaths, shown by the Registrar General, 7 were of illegitimate babies. This gives a legitimate neo-natal mortality rate of 13.6 per 1,000 legitimate live births registered in 1959 and an illegitimate neo-natal mortality rate of 21.7 per 1,000 illegitimate live births registered in 1959.

Maternal Mortality (Number of deaths—2). Rate: 0.29 per 1,000 total births (live and still) registered during the year.

There were two maternal deaths of Bristol mothers—both difficult deliveries, associated with complications which proved fatal.

VITAL STATISTICS

TABLE I. Supplied by the Registrar General

Population, marriages, births, deaths, natural increase, infant mortality—for Calendar Year 1959 and previous six years—
(Registrations during year)

	1959	1958	1957	1956	1955	1954	1953
Estimated population. Home (mid-year):	436,600	438,000	439,600	440,500	442,500	444,900	444,200
Marriages:							
Number	3,334	3,213	3,446	3,581	3,535	3,377	3,460
Rate persons married per 1,000 population	15.3	14.67	15.68	16.26	15.98	15.18	15.58
Birth registrations:							
Legitimate—males	3,313	3,416	3,444	3,271	3,216	3,298	3,365
females	3,028	3,226	3,205	3,105	3,030	3,075	3,271
Illegitimate—males	166	175	166	150	152	158	141
females	156	161	169	143	133	160	168
Total	6,663	6,978	6,984	6,669	6,531	6,691	6,945
Rate per 1,000 population	15.26	15.93	15.89	15.14	14.76	15.04	15.63
Illegitimate live births per cent of total live births	4.8	4.8	4.8	4.4	4.4	4.8	4.4
Stillbirth registrations:							
Legitimate—males	63	62	73	85	66	72	64
females	63	55	78	72	57	81	55
Illegitimate—males	1	3	5	4	6	2	4
females	7	2	2	9	6	5	3
Total	134	122	158	170	135	160	126
Rate per 1,000 live and still-births	20	17	22	25	20	23	18
Total live and still-births	6,797	7,100	7,142	6,839	6,666	6,851	7,071
Death registrations:							
Males	2,573	2,613	2,586	2,727	2,647	2,583	2,591
Females	2,601	2,614	2,598	2,668	2,561	2,582	2,555
Total	5,174	5,227	5,184	5,395	5,208	5,165	5,146
Rate per 1,000 population	11.85	11.93	11.79	12.25	11.77	11.61	11.58
Natural increase per 1,000 population	3.41	4.00	4.09	2.89	2.99	3.43	4.05
Deaths under one year (registered):							
Legitimate	120	135	120	125	118	132	148
Illegitimate	10	9	8	4	7	7	4
Total	130	144	128	129	125	139	152
Rate per 1,000 live births	20	21	18	19	19	21	22
Legitimate infant mortality rate—per 1,000 live births, legitimate	19	20	18	20	19	21	22
Illegitimate I.M. rate per 1,000 live births, illegit.	31	27	24	14	25	22	13
Deaths under four weeks: Total deaths	93	101	96	97	83	106	105
Neo-natal mortality rate per 1,000 live births	14	14	14	15	13	16	15
Diarrhoea and Enteritis (under two years):							
Deaths	1	2	3	2	3	1	3
Rate per 1,000 live births	0.15	0.29	0.43	0.30	0.46	0.15	0.43
Maternal mortality (including abortion):							
Deaths from:							
Sepsis of pregnancy, childbirth and the puerperium	—	—	—	1	1	1	1
Abortion with toxæmia	—	—	—	—	—	1	1
Other toxæmias of pregnancy and the puerperium	—	—	1	—	—	1	—
Haemorrhage of pregnancy and childbirth	—	—	—	—	—	—	1
Abortion without mention of sepsis or toxæmia	—	1	—	—	—	—	—
Abortion with sepsis	—	—	—	—	—	—	2
Other complications of pregnancy, childbirth and the puerperium	2	1	—	1	1	1	2
Total deaths	2	2	1	2	2	4	7
Rate per 1,000 total (live and still)	0.29	0.28	0.14	0.29	0.30	0.58	0.99

TABLE 2. Supplied by the Registrar General

Birth-rates, death-rates, analysis of mortality, maternal mortality
and case-rates for certain infectious diseases in the year 1959

(Provisional figures based on quarterly returns)

								BRISTOL		ENGLAND & WALES		
								Rates per 1,000 Home Population	Rates per 1,000 Total Births (Live & Still)	Rates per 1,000 Home Population	Rates per 1,000 Total Births (Live & Still)	
Birth Registrations:												
Live	..	..	..	..	..	..	..	15.3		16.5*	
Still	..	..	..	..	..	..	..		19.7		20.7
Death Registrations:												
ALL CAUSES (Crude)								11.9		11.6		
(Adjusted)								11.5				
Typhoid and paratyphoid fevers								—		0.00		
Whooping Cough								—		0.00		
Diphtheria								—		—		
Tuberculosis								0.07		0.08		
Influenza								0.2		0.17		
Smallpox								—		—		
Acute poliomyelitis (including polioencephalitis)								—		0.00		
Pneumonia								0.5		0.59		
Notifications (Corrected):												
Typhoid fever								0.01		0.00		
Paratyphoid								0.01		0.01		
Meningococcal infection								0.01		0.02		
Scarlet fever								0.59		1.06		
Whooping cough								0.53		0.73		
Diphtheria								—		0.00		
Erysipelas								0.13		0.07		
Smallpox								—		—		
Measles								12.25		11.88		
Pneumonia								0.87		0.59		
Acute poliomyelitis (including polioencephalitis):—												
Paralytic								0.02		0.02		
Non-paralytic								0.01		0.01		
Food poisoning								0.39		0.22		
Puerperal pyrexia									13.39			
<i>Rates per 1,000 Live Births</i>												
										<i>Bristol</i>	<i>England & Wales</i>	
Deaths under one year of age								19.5	22.0†
Deaths from diarrhoea and enteritis (under 2 years of age)								0.2	
Maternal Mortality:								<i>Rate per 1,000 Total Births (i.e., Live and Still)</i>				<i>Rate per Million Women aged 15 to 44 (England & Wales)</i>
								<i>Deaths</i>		<i>Deaths</i>		
								<i>No.</i>	<i>Rate</i>	<i>No.</i>	<i>Rate</i>	
								BRISTOL		ENG. & WALES		
Maternal causes—excluding abortion								2	0.29	244	0.32	27
Due to abortion								—	—	47	0.06	5
Total maternal mortality								2	0.29	291	0.38	32

* The provisional birth rate shown above for England and Wales is the highest since 1949.

† The provisional infant death rate for England and Wales is the lowest ever recorded in the country.

TABLE 3. Compiled from figures supplied by the Registrar General

Total deaths of Bristol Citizens by cause and age registered during Calendar Year 1959

DISEASE					Sex	All ages	0-	1-	5-	15-	45-	65-	75 & over
All Causes	..	..	..	..	M	2,573	79	11	13	108	766	703	893
					F	2,601	51	11	10	76	451	638	1,364
1. T.B. Respiratory	..	..	..	..	M	18	—	—	—	5	9	2	2
					F	9	—	—	—	1	6	1	1
2. T.B. Other	..	..	..	..	M	3	—	—	—	—	2	—	1
					F	2	—	—	—	—	—	—	2
3. Syphilitic Disease	..	..	..	..	M	4	—	—	—	—	—	1	3
					F	3	—	—	—	—	2	1	—
4. Diphtheria	..	..	..	..	M	—	—	—	—	—	—	—	—
					F	—	—	—	—	—	—	—	—
5. Whooping Cough	..	..	..	..	M	—	—	—	—	—	—	—	—
					F	—	—	—	—	—	—	—	—
6. Meningococcal Infection	..	..	..	..	M	—	—	—	—	—	—	—	—
					F	1	—	1	—	—	—	—	—
7. Acute Poliomyelitis	..	..	..	..	M	—	—	—	—	—	—	—	—
					F	—	—	—	—	—	—	—	—
8. Measles	..	..	..	..	M	—	—	—	—	—	—	—	—
					F	—	—	—	—	—	—	—	—
9. Other Infective and Parasitic Diseases	..	..	..	..	M	7	1	1	1	2	1	1	—
					F	4	—	—	—	1	1	1	1
10. Malignant Neoplasm of Stomach	..	..	..	..	M	79	—	—	—	2	31	24	22
					F	70	—	—	—	1	17	27	25
11. „ „ „ Lung, Bronchus	..	..	..	..	M	196	—	—	—	4	106	62	24
					F	18	—	—	—	2	11	2	3
12. „ „ „ Breast	..	..	..	..	M	1	—	—	—	—	—	—	1
					F	93	—	—	—	12	38	25	18
13. „ „ „ Uterus	..	..	..	..	F	39	—	—	—	3	15	10	11
14. „ Other & Lymph. Neoplasms	..	..	..	..	M	252	2	—	2	10	79	75	84
					F	201	—	1	1	9	67	46	77
15. Leukaemia, Aleukaemia	..	..	..	..	M	10	—	1	2	—	1	4	2
					F	19	—	1	3	—	8	2	5
16. Diabetes	..	..	..	..	M	11	—	—	—	—	3	3	5
					F	23	—	—	—	—	4	10	9
17. Vascular Lesions of Nervous System	..	..	..	..	M	311	—	1	—	2	68	85	155
					F	504	—	—	—	2	62	130	310
18. Coronary Disease, Angina	..	..	..	..	M	506	—	—	—	17	198	156	135
					F	341	—	—	—	3	56	107	175
19. Hypertension with Heart Disease	..	..	..	..	M	90	—	—	—	3	27	43	17
					F	115	—	—	—	1	18	41	55
20. Other Heart Disease	..	..	..	..	M	267	—	1	—	3	34	58	171
					F	444	—	—	—	3	35	79	327
21. Other Circulatory Disease	..	..	..	..	M	109	—	—	—	1	26	19	63
					F	155	—	—	—	2	21	31	101
22. Influenza	..	..	..	..	M	36	—	—	1	4	10	11	10
					F	45	—	—	—	4	6	13	22
23. Pneumonia (including Pneu. of Newborn)	..	..	..	..	M	111	16	1	1	3	19	25	46
					F	113	3	2	1	1	9	20	77
24. Bronchitis	..	..	..	..	M	197	2	—	1	2	57	67	68
					F	64	—	—	—	1	14	16	33
25. Other Diseases of Respiratory System	..	..	..	..	M	35	—	—	—	1	18	11	5
					F	15	—	—	—	1	5	4	5
26. Ulcer of Stomach and Duodenum	..	..	..	..	M	16	—	—	—	—	5	4	6
					F	5	—	—	—	—	—	2	3
27. Gastritis, Enteritis and Diarrhoea	..	..	..	..	M	7	—	—	—	1	4	1	1
					F	12	1	—	—	—	—	5	6
28. Nephritis and Nephrosis	..	..	..	..	M	19	—	—	—	8	6	1	4
					F	11	—	—	—	2	3	3	3
29. Hyperplasia of Prostate	..	..	..	..	M	24	—	—	—	—	1	8	15
30. Pregnancy, Childbirth, Abortion	..	..	..	..	F	2	—	—	—	2	—	—	—
31. Congenital Malformations	..	..	..	..	M	29	22	2	1	2	2	—	—
					F	21	12	2	1	2	3	1	—
32. Other Defined and Ill-Defined Diseases	..	..	..	..	M	131	35	3	2	4	34	22	31
					F	183	34	1	2	14	30	46	56
33. Motor Vehicle Accidents	..	..	..	..	M	39	—	1	1	18	6	9	4
					F	23	—	1	1	2	7	4	8
34. All other Accidents	..	..	..	..	M	43	1	—	1	10	8	7	16
					F	47	1	2	1	1	4	7	31
35. Suicide	..	..	..	..	M	21	—	—	—	4	11	4	2
					F	18	—	—	—	5	9	4	—
36. Homicide and Operations of War	..	..	..	..	M	1	—	—	—	1	—	—	—
					F	1	—	—	—	1	—	—	—

TABLE 4. Compiled from figures supplied by Registrar General
Causes of death registered during Calendar Year 1959

<i>Death Rate per 1,000 Population</i>	<i>Disease</i>	<i>No. Deaths 1959</i>	<i>Per cent. of all Deaths</i>
·062	1. T.B. Respiratory	27	·52
·011	2. T.B. Other	5	·10
·016	3. Syphilitic disease	7	·14
—	4. Diphtheria	—	—
·002	5. Whooping Cough	—	—
·002	6. Meningococcal infection	1	·02
—	7. Acute poliomyelitis	—	—
—	8. Measles	—	—
·025	9. Other infective and parasitic disease ..	11	·21
·341	10. Malignant neoplasm of stomach ..	149	2·88
·490	11. „ „ „ lung, bronchus ..	214	4·14
·215	12. „ „ „ breast	94	1·82
·089	13. „ „ „ uterus	39	·75
1·038	14. „ „ other and lymph. neoplasms..	453	8·76
·066	15. Leukaemia, aleukaemia	29	·56
·078	16. Diabetes	34	·66
1·867	17. Vascular lesions of nervous system ..	815	15·75
1·940	18. Coronary disease, angina	847	16·37
·470	19. Hypertension with heart disease ..	205	3·96
1·628	20. Other heart disease	711	13·74
·605	21. „ „ circulatory disease	264	5·10
·186	22. Influenza	81	1·57
·513	23. Pneumonia (including pneumonia of new-born)	224	4·33
·598	24. Bronchitis	261	5·04
·115	25. Other diseases of respiratory system ..	50	·97
·048	26. Ulcer of stomach and duodenum ..	21	·41
·044	27. Gastritis, enteritis and diarrhoea ..	19	·37
·069	28. Nephritis and nephrosis	30	·58
·055	29. Hyperplasia of prostate	24	·46
·005	30. Pregnancy, childbirth, abortion ..	2	·04
·115	31. Congenital malformations	50	·97
·719	32. Other defined and ill-defined diseases ..	314	6·07
·142	33. Motor vehicle accidents	62	1·20
·206	34. All other accidents	90	1·74
·089	35. Suicide	39	·75
·005	36. Homicide and operations of war ..	2	·04
11·852	All Causes	5,174	

TABLE 5. Deaths (corrected for transfers) occurring within the years 1958 and 1959 (Local figures)

<i>Inter-national Code No.</i>		<i>1959</i>		<i>1958</i>	
		<i>Total</i>	<i>Including</i>	<i>Total</i>	<i>Including</i>
001-008	T.B. of respiratory system	30		37	
010-019	T.B. other	4		7	
020-029	Syphilis and its sequelae	6		8	
030-039	Gonococcal infection and other V.D.	—		—	
040-049	Infectious disease in intestinal tract	1		2	
050-064	Other bacterial diseases	1		—	
070-074	Spirochaetal diseases (except syphilis)	—		—	
080-096	Diseases attributed to viruses	5		4	
100-108	Typhus and other rickettsial diseases	—		—	
110-117	Malaria	—		—	
120-138	Other infective and parasitic diseases	2		1	
140-148	Malignant neoplasm of buccal cavity and pharynx	21		18	
150-159	Malignant neoplasm digestive organs and peritoneum	375		333	
151	Malignant neoplasm stomach		151		117
153	Malignant neoplasm large intestine (except rectum)		91		84
154	Malignant neoplasm rectum		44		56
160-165	Malignant neoplasm respiratory system	216		215	
170-181	Malignant neoplasm breast & genito-urinary system	256		242	
170	Malignant neoplasm breast		94		87
171/4	Malignant neoplasm uterus		40		44
175	Malignant neoplasm ovary, fallopian tube and broad ligament		25		33
177	Malignant neoplasm prostate		37		23
180/1	Malignant neoplasm kidney, bladder and other urinary organs		56		48
190-199	Malignant neoplasm other and unspecified sites ..	58		60	
200-205	Neoplasms of lymphatic & haematopoietic tissues	51		52	
210-229	Benign neoplasm	3		7	
230-239	Neoplasm of unspecified nature	16		6	
240-245	Allergic disorders	10		17	
250-254	Diseases of thyroid gland	2		6	
260	Diabetes mellitus	33		36	
270-277	Diseases of other endocrine glands	3		3	
280-289	Avitaminoses, and other metabolic diseases	1		5	
290-299	Diseases of blood-forming organs	17		20	
300-309	Psychoses	4		3	
310-318	Psychoneurotic disorders	—		—	
320-326	Disorders of character, behaviour and intelligence	2		—	
330-334	Vascular lesions affecting central nervous system..	811		767	
331	Cerebral haemorrhage		281		280
332	Cerebral embolism and thrombosis		396		389
340-345	Inflammatory diseases of central nervous system..	8		18	
350-357	Other diseases of central nervous system	39		31	
360-369	Diseases of nerves and peripheral ganglia	2		1	
370-379	Inflammatory diseases of eye	—		—	
380-389	Other diseases and conditions of eye	—		—	
390-398	Diseases of ear and mastoid process	—		2	
400-402	Rheumatic fever	—		2	
410-416	Chronic rheumatic heart disease	83		104	
420-422	Arteriosclerotic and degenerative heart disease ..	1410		1463	
420	Arteriosclerotic heart disease, including coronary disease		834		839
422	Other myocardial degeneration		546		601
430-434	Other diseases of the heart	76		69	
440-447	Hypertensive disease	273		284	
440/3	Hypertensive heart disease		234		233
450-456	Disease of arteries	169		237	
460-468	Diseases of veins and other diseases of circulatory system	49		19	

TABLE 5—continued

Inter- national Code No.		1959		1958	
		Total	Including	Total	Including
470-475	Acute upper respiratory infections	—		2	
480-483	Influenza	77		19	
490-493	Pneumonia (4 weeks plus)	197		196	
500-502	Bronchitis	264		255	
510-527	Other diseases of respiratory system	47		48	
530-539	Diseases of buccal cavity and oesophagus	1		3	
540-545	Diseases of stomach and duodenum	23		48	
550-553	Appendicitis	4		7	
560-561	Hernia of abdominal cavity	16		14	
570-578	Other diseases of intestines and peritoneum	29		36	
580-587	Diseases of liver, gallbladder and pancreas	19		30	
590-594	Nephritis and nephrosis	32		32	
600-609	Other diseases of urinary system	39		28	
610-617	Diseases of male genital organs	25		35	
620-626	Diseases of breast, ovary, fallopian tube and para- metrium	1		1	
630-637	Diseases of uterus and other female genital organs	—		2	
640-649	Complications of pregnancy	—		—	
650-652	Abortion	—		—	
660	Delivery without complication	—		—	
670-678	Delivery with specified complication	2		—	
680-689	Complications of the puerperium	—		1	
690-699	Infections of skin and subcutaneous tissue	2		2	
700-716	Other diseases of skin and subcutaneous tissue	5		2	
720-727	Arthritis and rheumatism, except rheumatic fever	20		32	
730-738	Osteomyelitis and other diseases of bone and joint	5		4	
740-749	Other diseases of musculoskeletal system	—		3	
750-759	Congenital malformations	50		53	
760-769	Birth injuries, asphyxia and infections of newborn	35		63	
762	Postnatal asphyxia and atelectasis		9		48
763	Pneumonia of the newborn		5		5
770-776	Other diseases peculiar to early infancy	37		12	
780-789	Symptoms referable to systems or organs	7		3	
790-795	Senility and ill-defined diseases	14		15	
E800-802	Railway accidents	3		2	
E810-825	Motor vehicle traffic accidents	56		56	
E830-835	Motor vehicle non-traffic accidents	—		—	
E840-845	Other road vehicle accidents	—		1	
E850-858	Water transport accidents	4		2	
E860-866	Aircraft accidents	1		—	
E870-888	Accidental poisoning by solid and liquid substances	—		1	
E890-895	Accidental poisoning by gases and vapours	16		18	
E900-904	Accidental falls	44		30	
E910-936	Other accidents	24		33	
E940-946	Complications due to nontherapeutic medical and surgical procedures	—		—	
E950-959	Therapeutic misadventure and late complications of therapeutic procedures	1		—	
E960-965	Late effects of injury and poisoning	—		—	
E970-979	Suicide and self-inflicted injury	39		49	
E980-985	Homicide and injury purposely inflicted by other persons	2		1	
E990-999	Injury resulting from operations of war	—		—	
	TOTALS	5178		5218	

TABLE 6. Notifiable cases during 1959 (including Port Cases) Local figures
(During Calendar year)

Notifiable Diseases	Notifications								Removed to hospital		Notified in each quarter				Attack rate per 1,000 popu- lation	Deaths (corrected for transfers) not necessarily relevant to notifications of 1959						
	At ages—years:										1st					At ages—years:						
	At all ages	Under 1	1 to 4	5 to 14	15 to 24	25 to 44	45 to 64	65 and upwards	No.	%	2nd	3rd	4th	All ages	Under 1	1 to 4	5 to 14	15 to 44	45 to 64	65 and upwards		
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Erysipelas	55	—	2	6	2	12	24	7	13	21	19	6	9	0.13	—	—	—	—	—		
Scarlet fever	259	—	80	173	3	3	—	66	25	83	63	44	69	0.59	—	—	—	—	—		
Paratyphoid	5	—	2	3	—	—	—	2	40	4	—	1	—	0.01	—	—	—	—	—		
Typhoid	3	—	—	1	—	2	—	2	67	—	—	2	1	0.01	—	—	—	—	—		
Meningococcal infection	4	1	1	1	—	1	—	3	75	2	—	2	—	0.01	1	—	—	—	—		
Poliomyelitis (including poliomyelitis)	13	1	5	6	1	—	—	—	12	92	—	2	11	—	0.03	—	—	—	—	—		
Pneumonia (excluding pneumonia of new born)	379	16	33	40	14	52	107	117	174	46	249	61	25	44	0.87	197	11	2	2	3	23	156
Malaria	2	—	—	2	—	—	—	—	—	—	—	—	2	0.01	—	—	—	—	—	—	
Dysentery	339	10	135	97	25	47	19	6	51	15	72	72	47	148	0.78	—	—	—	—	—	
Acute infectious encephalitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	1†	—	—	1	—	
Puerperal pyrexia* (City cases only)	106 91	—	—	—	58	48	—	—	—	—	37	19	30	20	—	—	—	—	—	—	—	
Ophthalmia neonatorum	16	—	—	—	—	—	—	—	—	7	7	1	1	—	—	—	—	—	—	—	
Measles	5346	191	3080	2058	2	4	—	1	87	2	1347	3109	850	40	12.25	—	—	—	—	—	
Whooping cough	233	25	125	74	4	3	1	1	26	11	58	61	61	53	0.53	—	—	—	—	—	
Acute rheumatism (to 15 years)	21	—	1	20	—	—	—	—	15	71	7	1	7	6	—	—	—	—	—	—	
Food poisoning	171	20	26	40	21	34	18	12	30	18	11	43	90	27	0.39	1	—	—	—	1	

* 15 cases occurred at home of which 6 were subsequently removed to hospital. No deaths were directly attributed to puerperal pyrexia.

† Died outside Bristol.

TABLE 7. Tuberculosis Notifications in Bristol

CASES															
			Sex	At All Ages	Un- der one	1-	5-	10-	15-	20-	25-	35-	45-	55-	65 and over
1959—															
Pulmonary Tuberculosis															
New notifications	..	..	M	148	1	1	3	3	8	6	26	21	27	40	12
			F	71	—	1	3	3	11	11	15	14	7	3	3
Transfers from other areas	..	..	M	34	—	—	—	—	—	6	12	8	5	1	2
			F	15	—	—	—	—	—	2	6	4	1	1	1
Deaths mentioning Tuberculosis, not notified	..	..	M	7	—	—	—	—	—	—	—	—	1	3	3
			F	4	—	—	—	—	—	—	1	1	—	1	1
1959—															
Non-Pulmonary Tuberculosis															
New notifications	..	..	M	23	—	2	1	1	2	2	4	3	3	2	3
			F	24	—	1	1	—	3	4	3	2	1	3	6
Transfers from other areas	..	..	M	2	—	—	—	—	—	1	—	—	—	1	
			F	2	—	—	—	—	—	1	—	—	—	1	—
Deaths mentioning Tuberculosis, not notified	..	..	M	2	—	—	—	—	—	—	—	—	1	—	1
			F	2	—	—	—	—	—	—	—	—	—	1	1
New Notifications—															
Pulmonary—	1958	..	M	173	—	3	1	7	12	12	27	27	36	34	14
			F	98	—	4	2	5	13	17	21	12	11	5	8
	1957	..	M	187	1	—	4	2	18	16	40	27	34	28	17
			F	114	2	1	2	3	15	24	37	15	10	4	1
	1956	..	M	191	—	4	10	3	15	21	29	21	39	32	17
			F	113	—	4	4	5	16	20	25	19	12	5	8
	1955	..	M	201	2	3	9	6	14	15	36	35	27	36	18
			F	147	—	3	3	3	26	24	47	21	8	5	7
	1954	..	M	218	2	4	11	4	24	21	42	25	46	24	15
			F	168	—	2	9	11	34	27	45	24	8	2	6
	1953	..	M	239	—	10	14	4	21	26	43	29	46	30	16
			F	185	—	7	6	11	20	38	42	29	17	7	8
	1952	..	M	266	—	8	11	6	23	35	49	39	39	37	19
			F	214	—	6	5	16	41	36	61	29	8	7	5
	1951	..	M	296	1	11	10	9	28	43	50	45	58	29	12
			F	208	—	9	10	9	31	51	47	18	15	10	8
	1950	..	M	223	2	11	10	7	27	16	44	36	34	30	6
			F	205	—	9	12	9	40	48	43	19	12	11	2
Non-Pulmonary—															
	1958	..	M	15	—	3	—	1	—	3	4	1	2	1	—
			F	21	—	1	—	1	2	3	7	2	1	—	4
	1957	..	M	13	—	—	1	3	1	1	5	—	—	2	—
			F	23	—	2	3	1	3	1	5	3	2	1	2
	1956	..	M	28	—	2	2	4	1	4	4	3	2	5	1
			F	20	—	—	1	2	1	—	6	3	3	2	2
	1955	..	M	19	—	—	2	—	1	3	5	3	2	2	1
			F	27	—	3	4	—	7	5	3	2	1	1	1
	1954	..	M	19	—	2	4	1	2	2	4	—	1	—	3
			F	30	—	2	—	2	5	6	11	—	—	1	3
	1953	..	M	16	1	5	—	—	3	2	2	1	1	—	1
			F	22	—	2	1	—	6	5	3	4	—	—	1
	1952	..	M	24	—	2	5	3	3	2	2	3	2	2	—
			F	30	—	6	3	—	1	3	6	7	3	—	1
	1951	..	M	26	1	4	2	1	3	2	3	3	2	4	1
			F	25	2	1	3	4	3	4	6	—	—	—	2
	1950	..	M	29	2	3	7	3	2	2	4	4	2	—	—
			F	22	—	6	1	2	2	2	3	5	—	1	—

TABLE 8. Tuberculosis in Bristol—Deaths*(Registrar General's corrected figures)***PULMONARY TUBERCULOSIS—**

<i>Year</i>	<i>Sex</i>	<i>At All Ages</i>	<i>Under One</i>	<i>1—</i>	<i>5—</i>	<i>15—</i>	<i>45—</i>	<i>65 and over</i>
1959	M	18	—	—	—	5	9	4
	F	9	—	—	—	1	6	2
1958	M	22	—	—	—	2	9	11
	F	15	—	—	—	4	3	8
1957	M	23	—	—	—	3	9	11
	F	8	—	—	—	4	3	1
1956	M	23	—	—	—	4	13	6
	F	14	—	—	—	8	2	4
1955	M	38	—	—	—	11	19	8
	F	14	—	—	—	8	2	4
1954	M	41	—	—	—	12	23	6
	F	26	—	—	—	13	9	4
1953	M	61	—	—	—	24	28	9
	F	32	—	—	—	16	9	7
1952	M	62	1	—	—	20	31	10
	F	29	—	—	—	13	10	6
1951	M	83	—	—	1	27	43	12
	F	67	—	—	1	39	20	7
1950	M	89	—	1	—	28	47	13
	F	93	—	2	—	55	28	8

NON-PULMONARY TUBERCULOSIS—

1959	M	3	—	—	—	—	2	1
	F	2	—	—	—	—	—	2
1958	M	4	—	—	—	4	—	—
	F	6	—	1	—	—	3	2
1957	M	2	—	—	1	—	1	—
	F	3	—	—	—	—	1	2
1956	M	5	—	1	1	1	1	1
	F	1	—	—	—	—	—	1
1955	M	3	—	—	—	1	2	—
	F	4	—	—	1	1	—	2
1954	M	3	—	1	1	—	1	—
	F	4	—	1	—	3	—	—
1953	M	6	—	3	—	2	—	1
	F	6	—	1	1	1	2	1
1952	M	5	—	—	1	2	1	1
	F	6	—	1	—	2	1	2
1951	M	10	1	2	1	3	3	—
	F	4	—	1	—	2	1	—
1950	M	14	1	2	1	2	7	1
	F	5	—	1	1	1	1	1

TABLE 9. Infant Mortality (*Corrected for transfers*)

Deaths 1959 (*Local figures*)
(*Occurring within Calendar Year*)

1958	Cause of Death	Total 1959	First day	From one day under one week	From one week to four weeks	Total under four weeks	Total from one month to under twelve months
—	T.B. respiratory	—	—	—	—	—	—
—	Meningococcal meningitis ..	—	—	—	—	—	—
—	Non-meningococcal meningitis ..	—	—	—	—	—	—
—	Acute poliomyelitis	—	—	—	—	—	—
—	Whooping cough	—	—	—	—	—	—
—	Measles	—	—	—	—	—	—
12	Pneumonia (four weeks plus) ..	11	—	—	—	—	11
5	Pneumonia of the newborn ..	5	—	1	4	5	—
—	Influenza	—	—	—	—	—	—
2	Bronchitis	2	—	—	—	—	2
2	Gastro-enteritis (four weeks plus)	1	—	—	—	—	1
39	*Congenital malformations ..	36	9	8	5	22	14
6	*Birth injury	19	9	9	1	19	—
48	*Atelectasis	9	5	4	—	9	—
2	*Haemolytic disease of newborn ..	3	—	3	—	3	—
—	Haemorrhagic disease of newborn	—	—	—	—	—	—
5	*Other diseases of early infancy ..	7	2	3	1	6	1
9	*Immaturity (unqualified)	29	17	11	—	28	1
12	Other causes	9	2	—	—	2	7
142	TOTALS	131	44	39	11	94	37
	Rate per 1,000 live births registered in 1959	19.66	6.60	5.85	1.65	14.11	5.55
Year 1958	{ TOTALS	142	49	33	17	99	43
	{ Rate per 1,000 live births registered	20.35	7.02	4.73	2.44	14.19	6.16

* Where there has been mention of immaturity—{ 1959—Bristol cases—55
During 1958—Bristol cases—66

Infant Deaths in:— Hospitals 114 (including 2 in hospitals outside City area)
Nursing Homes —
Private Residences 17 (including 1 in P.Res. outside City area)
Total 131

PREVALENCE AND CONTROL OF INFECTIOUS DISEASES

Dr. P. W. Bothwell

General

The epidemiology of infectious diseases has been changing over the last decade in a number of ways: the reduced overall incidence of bacterial infections, some of which have almost if not quite disappeared, like typhoid and paratyphoid, and diphtheria; and reduced virulence displayed by others still with us, like scarlet fever and tuberculosis, which chemotherapy and socio-medical advances have rendered less serious than in the past; and the emergence of virus diseases as those causing most concern to Public Health Departments. The diseases which cause most morbidity are influenza, infectious mononucleosis, infective hepatitis, poliomyelitis and measles, of which only the last two are routinely notifiable.

This is not to say that continuing vigilance and control services for possible bacterial infections are no longer required and notably in the field of dysentery, food poisoning and tuberculosis these services are still highly active. But it does emphasize that some reorientation even in the micro-organismal field is desirable, and particularly that these virus infections should be notifiable, to the exclusion perhaps of some of the less prevalent bacterial diseases where notifiable regulations exist and are nominal only. Such views are common in Public Health today, but legislation has not yet caught up with modern requirements in notification.

It is in the field of virology, which has not only relationships with the immediate infectious disease process, but possibly long-term relationships with the chronic diseases, that great advances and considerable surprises are to be expected.

In discussing infectious diseases the corollary of immunisation against them is necessary and this subject is discussed elsewhere in the report.

Similarly, the constant hygiene battle goes on by the Public Health Inspection Section in its attempt to elevate standards of food handling and, though there is much still to be done, the public would be pleasantly surprised were they able to compare standards now common in many catering and food preparation establishments with those prevalent even ten years ago.

At a time when visitors from outer space are both looked and listened for, it is of interest to realise that other forms of life compete continually with us on this earth, and satisfactory that so much control over them has been achieved by the Public Health Departments and the bacteriologists.

Comment on the Notified Diseases, 1959 (Table I)

Diphtheria: It is 10 years since a case was reported in Bristol.

Whooping cough: 233 cases, compared with 237 in 1958, and 1,014 in 1957.

Food poisoning: 171 cases, compared with 162 in 1958, and 143 in 1957, which reflects more identification and reporting of cases.

Of these, the one death occurred in a woman of 73 (*Salmonella enteritidis*).

Salmonella typhimurium was as usual the commonest infecting agent.

Measles: Was the most prevalent disease, with 5,346 notified cases, but no deaths.

Table 2—Dysentery

Notifications in months				Age and Sex Distribution			Total	
					M.	F.		
January	16	Under 1	7	4	11
February	11	1—1 & 11/12	16	16	32
March	46	2—4	58	53	111
April	49	5—9	42	25	67
May	13	10—14	8	12	20
June	9	15—19	6	9	15
July	17	20—29	5	20	25
August	8	30—39	7	19	26
September	21	40—49	5	12	17
October	13	50—59	5	4	9
November	51	60—69	1	2	3
December	85	70+	1	2	3
						<hr/>	<hr/>	
				All ages		161	178	339

Total Notifications = 339

No. proved positive = 226*

* All 226 were Sonne except for 3 Flexner Dysentery;
of these 3, 1 was an Irishman just arrived in Bristol;
1 was a Doctor just arrived in Bristol;
1 was a workman—source unknown.

Table 3—Food Poisoning 1959*Bristol*

- (a) *Food Poisoning Notifications as returned to Registrar General (Corrected)*
1st Quarter—11 2nd Quarter—43 3rd Quarter—90 4th Quarter—27
TOTAL—171
- (b) *Cases Otherwise Ascertained as returned to Registrar General*
1st Quarter—4 2nd Quarter—7 3rd Quarter—2 4th Quarter—2
TOTAL—15
- (c) *Symptomless Excretors as returned to Registrar General*
1st Quarter—Nil 2nd Quarter—Nil 3rd Quarter—Nil 4th Quarter—Nil
TOTAL—Nil
- (d) *Fatal Cases as returned to Registrar General*
1st Quarter—Nil 2nd Quarter—Nil 3rd Quarter—1 4th Quarter—Nil
TOTAL—1

Agent			Particulars of Outbreaks				Total No. of Cases
			No. of outbreaks		No. of cases		
			Family Outbreaks	Other Outbreaks	Notified	Otherwise Ascertained	
Agent identified:							
(a)	Chemical Poisons (Type to be stated)	..	—	—	—	—	—
(b)	Salmonella (Type to be stated)						
	Typhimurium	..	12	1	35	9	44
	Newport	..	7	—	21	2	23
	Java	..	1	—	3	—	3
	Enteritidis	..	1	—	3	—	3
	Bovis Morbificans	..	1	—	2	—	2
(c)	Staphylococci (including Toxin)	..	—	—	—	—	—
(d)	Cl. botulinum	..	—	—	—	—	—
(e)	Cl. welchii	..	—	—	—	—	—
(f)	Other bacteria (to be named)	..	—	—	—	—	—
TOTALS		..	22	1	64	11	75
Agent not identified							
		..	—	—	—	—	—

Food Poisoning 1959—continued.

<i>Agent</i>		<i>Particulars of Single Cases</i>		<i>Total No. of Cases</i>
		<i>No. of Cases Notified</i>	<i>Otherwise Ascertained</i>	
Agent identified:				
(a)	Chemical Poisons (type to be stated)	..	—	—
(b)	Salmonella:— (type to be stated)			
	Typhimurium	..	37	37
	Newport	.. ..	7	11
	Meunchen	.. ..	1	1
	Bredene	.. ..	2	2
	Worthington	.. ..	2	2
	St. Paul	.. ..	1	1
	Heidelberg	.. ..	2	2
	Poona	.. ..	1	1
(c)	Staphylococci (including toxin)	.. ..	3	3
(d)	Cl. botulinum	.. ..	—	—
(e)	Cl. welchii	.. ..	—	—
(f)	Other bacteria (to be named)	.. ..	—	—
TOTALS		..	56	60
Agent not identified		.. ..	51	51

Table 4—Notified Cases of Typhoid etc., in Bristol during 1959

<i>Sex</i>	<i>Age</i>	<i>Comments</i>
TYPHOID		
1. Male	25	Fever and diarrhoea. Diagnosed clinically because of response to Chloromycetin. No organisms were found in blood or faeces or urine. Serum tests very equivocal.
2. Female	29	Classical Typhoid. Course—uncooked mussels in Sicily. No other Bristol contacts.
3. Male	10	Classical typhoid. Rose spots, spleen etc. Blood and faeces + for organism. Very full investigations carried out on family, all possible contacts and possible water supply. Nil abnormal found.
PARATYPHOID		
1. Female	5	Notification from hospital of infection. Stools from other children later found to be positive on 2nd March.
2. Male	3	They were not all clear until 20th May. No source discovered. Para. B.
3. Female	10	
4. Female (members of same family)	2	
5. Male	5	Positive Widal but negative for organisms. Remainder of family checked and all negative. Almost certainly contracted at Woolacombe, Devon, on holiday 10 days' before. The local M.O.H. was informed and he stated that other cases were occurring there.

Food Poisoning

There was, once again, an increase in the number of suspected cases of food poisoning investigated by the Department.

Several cases of sickness and diarrhoea occurred amongst some Civil Service staff who had purchased sandwiches at a City store. Conditions in the food sales department at the store were excellent but four members of the staff had also been ill. An employee of the Bristol Royal Infirmary and three other customers who had had symptoms were traced.

These persons had purchased and eaten either ham egg and tomato, pork or salmon sandwiches. *Staphylococcus aureus* was found in one tin of ham from stock; and on the hands, the nose or the throat swabs from store employees. Faeces specimens were supplied by some of those affected but in only one case was a positive result obtained. It could not be defined whether infection arose from the tinned meat or from handling by the staff.

An outbreak occurred in a Girls' Hostel where several of the occupants were taken ill. Samples of various foods were examined with negative results. Faeces specimens were secured from all and eight were positive *Salmonella typhimurium*. No conclusion could be arrived at but it was suspected that one of the girls had had symptoms for some time and had introduced it to the hostel.

In consequence of a number of food poisoning incidents in the Bristol area, due to *Salmonella Newport* which was also found in other parts of the country at the same time, Dr. Galbraith of the Central Public Health Laboratory, London, visited Bristol in May with a view to enquiries regarding consumption of imported boneless meat as it was thought that some of this meat may have been consumed by Bristol patients. Extensive enquiries were made amongst local wholesale butchers who did not in fact receive any of this meat.

Faeces samples were obtained from the staffs of two shops of one butchering firm, having branches throughout the country, with negative results and no connection with this meat was established.

Typhoid Fever

The one case arising in Bristol was a schoolboy aged 10 years who lived with his parents in a new house near which was an old cottage where he often played with friends.

Milk was heat treated and although mains water was the household supply in the cottage, there was a well and cesspool drainage. Enquiries revealed that he had been in the habit of drinking water from the well and from a spring nearby. A number of samples and swabs secured over a period from the cesspool, well, and spring and from points in the house drainage system all proved negative for typhoid organisms. Faeces samples from all possible contacts were also negative and there was no history of visits outside Bristol within the critical period. The case yielded no likely clue whatever and fortunately no other cases occurred.

Tabulation by Age, Sex and Clinical Classification of Cases notified as Acute Rheumatism during the year 1959

Notification Area
C.C. Bristol C.B.

Total — 27

Clinical Classification of Case Notified	AGE IN YEARS										All Ages M F		Total Both Sexes (including recurrences)
	0—4		5—9		10—14		15 & over						
	M	F	M	F	M	F	M	F	M	F			
1. Rheumatic Pains and/or Arthritis without heart disease	—	—	1*	4	1	1	—	—	2	5	7	(including 1 recurrence*)	
2. Rheumatic Heart Diseases (Active)													
(a) alone	—	—	—	—	1	—	—	—	1	—	1	—	
(b) with polyarthritis	—	1	3*	4	2	3	—	—	5	8	13	(including 1 recurrence*)	
(c) with chorea	—	—	—	—	—	—	—	—	—	—	—	—	
3. Rheumatic Heart Diseases (Quiescent) ..	—	—	—	—	—	—	—	—	—	—	—	—	
4. Rheumatic Chorea (alone)	—	—	—	—	—	—	—	—	—	—	—	—	
TOTAL Rheumatic Cases	—	1	4	8	4	4	—	—	8	13	21	(including 2 recurrence*)	
5. Congenital Heart Disease	—	—	—	—	—	—	—	—	—	—	—	—	
6. Other non-rheumatic heart disease or disorder	—	—	—	—	—	—	—	—	—	—	—	—	
7. Not rheumatic or cardiac disease	1	—	—	1	2	2	—	—	3	3	6	—	
TOTAL Non-Rheumatic Cases	1	—	—	1	2	2	—	—	3	3	6	—	

EMPLOYMENT IN THE BRISTOL AREA

The figures are estimates based partly on the number of national insurance cards exchanged in the quarter beginning June, and partly on returns rendered by employers of five or more workpeople, showing the number of insurance cards held by them. Where information is available that cards were exchanged at one Local Office for persons working in the area of another Local Office, the figures for the former Office have been reduced and those for the latter correspondingly increased in order to make the figures in all cases relate as closely as possible to the numbers working in each area.

NOTE: This statement has been prepared solely for the purpose of providing an approximate indication of the industrial structure of the area. The figures are not sufficiently precise to enable comparisons to be made in detail between consecutive years, and no significance should be attached to relatively small changes.

We are indebted to Mr. S. J. Murray, Manager of the Bristol Employment Exchange of the Ministry of Labour and National Service, for the following table.

Estimated numbers of Insured Employees in the area of the Bristol, Avonmouth, Kingswood and Westbury-on-Trym Employment Exchanges at June 1959.

<i>Industrial Group</i>	<i>Males aged 15 and over</i>	<i>Females aged 15 and over</i>	<i>Total</i>
Distribution	18,565	15,513	34,078
Vehicles (Including Aircraft)	23,660	2,671	26,331
Professional Services	8,756	15,297	24,053
Transport etc.	18,418	2,403	20,821
Food, Drink and Tobacco	11,524	8,534	20,058
Construction	18,809	1,050	19,859
Miscellaneous Services	7,996	10,974	18,970
Paper, Printing & Publishing	10,555	5,839	16,394
Engineering, Electrical Goods	9,243	2,046	11,289
Public Administration	4,891	1,539	6,430
Insurance and Banking	3,150	2,582	5,732
Clothing and Footwear	1,653	3,302	4,955
Public Utilities	3,504	641	4,145
Metal Goods	2,369	1,070	3,439
Chemicals etc.	2,419	786	3,205
Metal Manufacture	2,809	369	3,178
Timber—Furniture	2,369	689	3,058
Other Manufacturing Industries	1,892	562	2,454
Agriculture & Fisheries	1,249	333	1,582
Shipbuilding & Marine Engineering	1,413	161	1,574
Textiles	798	652	1,450
Bricks	1,022	371	1,393
Mining	650	45	695
Leather	334	144	478
Ex-H.M. Forces	61	—	61
* Grand Total	158,109	77,573	235,682

* Most civil servants have their contributions paid without the use of cards and are, therefore, excluded from the figures. Also excluded are seafarers employed on foreign-going ships, whose contributions are paid in bulk.

The Weather in 1959

Month	Air Temperature (°F)				Rainfall (")			Sunshine (hours)			Soil Temperature (°F)			Pressure (mb) Mean at 09.00 hrs.		
	Means A Max.	Means B Min.	Means of A & B	Diff. from normal	Max.	Min.	No. ground frosts	Total	Per cent of average	Most in a day	Daily means	Per cent of average	4" 8" 24"			
January ..	43.2	32.6	37.6	—2.8	54	20	22	3.94	118	0.84	2.53	169	36.2	37.4	40.8	1013.2
February ..	45.3	35.6	40.1	—0.6	61	27	13	0.33	13	0.27	2.13	81	37.6	38.4	39.9	1032.8
March ..	52.3	39.7	46.0	+2.1	60	31	14	2.74	120	0.41	3.55	92	43.3	43.8	45.2	1012.5
April ..	56.4	43.1	49.8	+2.2	68	35	7	2.87	131	0.60	4.91	90	48.9	48.5	49.3	1009.8
May ..	69.2	45.9	55.5	+2.4	74	33	6	1.68	65	0.37	7.02	112	56.5	55.7	54.9	1019.9
June ..	67.5	51.2	59.4	+0.9	76	40	0	1.74	79	0.50	6.95	100	62.9	62.1	61.0	1020.3
July ..	72.0	54.2	63.1	+1.6	84	47	0	3.05	97	0.89	7.32	115	66.2	65.1	63.4	1018.0
August ..	71.7	54.8	63.3	+2.3	82	42	0	1.36	37	0.54	6.38	107	65.0	65.1	64.3	1019.9
September ..	71.1	49.3	60.2	+3.1	81	37	2	0.19	6	0.16	7.08	151	59.9	60.9	62.1	1022.8
October ..	63.4	47.1	55.3	+4.2	79	35	2	3.57	96	1.31	4.67	143	52.9	54.2	57.4	1014.9
November ..	52.1	40.3	42.2	+1.4	61	27	11	4.38	119	1.03	2.02	107	44.6	45.6	49.1	1008.4
December ..	49.5	39.0	44.3	+2.9	55	28	12	7.00	191	0.71	1.28	87	41.8	42.9	45.6	1003.4
Totals or Means ..	59.2	44.4	51.7	+1.6			89	32.85	91		4.67	112	51.3	51.6	52.8	1003.4

The Meteorological Statistics have been provided by Mr. G. E. Clothier of the Department of Agriculture and Horticulture, University of Bristol Research Station, Long Ashton.

MATERNAL & CHILD HEALTH, NURSING AND ALLIED SERVICES

Dr. Sarah Walker

(Senior Medical Officer—Maternal and Child Health)

Maternity Services

The main services for expectant and nursing mothers and young children have continued during 1959, to be provided along the same general lines as described in previous Reports.

In the field of ante-natal care, we have continued to work closely with the general practitioners, now numbering 83, who undertake pre-natal care of their patients in our clinics. Where general practitioners undertake ante-natal work in their own surgeries, usually in areas where we have no suitable clinic premises to offer them, arrangements are often made for the domiciliary midwives to attend the surgery, so that mothers having their babies at home can be seen by doctor and midwife together. Many of these doctors are pleased to make use of the services we provide for taking routine blood tests and for parentcraft and relaxation classes for expectant mothers.

Although there has been a slight reduction in the number of sessions held by the consultant obstetricians in peripheral clinics, this most valuable service has continued, which is not only of the greatest benefit to the mothers concerned, but ensures team work between the doctors, consultants and midwives taking part in the service.

During the year, changes were made in the administration and staffing of the consultant ante-natal sessions at Southmead Clinic, to meet the request of the consultant obstetricians, mainly in connection with their training schemes for medical students and pupil midwives. The administration and nursing staffing of sessions at Southmead Clinic, previously undertaken by the Health Department, has now been delegated to the Hospital. Sister Jones, our Centre Superintendent, is in attendance to ensure the necessary liaison with the domiciliary health and social services. We also, in close co-operation with the staff of the hospital maternity unit, continue to organise the parentcraft classes at Southmead Clinic, and in this connection we have been glad to have the help of the Hospital physiotherapists, who run a relaxation and ante-natal class in conjunction with the parentcraft class.

The proportion of Bristol mothers delivered in hospital remains high at 74.3 per cent. This high level is only maintained by a policy, in suitable cases, of early discharge for home nursing—a trend, which, as the following table shows, has been increasing over the last five years.

Year	No. of Births in Hospital (Bristol Residents)	Mothers discharged early for home nursing—		
		In first 3 days	4th—6th day Inclusive	7th—9th day Inclusive
1955	4,844	144	113	132
1956	5,043	178	102	240
1957	5,314	284	165	406
1958	5,249	396	222	662
1959	4,995	423	228	692

As in many other parts of the country, we have experienced difficulty in recruiting new midwives to replace those who reach retirement or leave the service. This is a matter of national as well as local concern. While there is no shortage of nurses taking midwifery training, few subsequently take up midwifery as a career.

To attract pupil midwives with a special interest in domiciliary work, the Health Committee this year set up a scheme of Part II training in which the whole of the six months training is undertaken on the district. This scheme is limited to an intake of twelve pupils a year. The joint scheme of Part II training, with the Bristol Maternity Hospital, continues, as hitherto, with an intake of up to sixty pupils a year.

Details of a night rota plan for midwives have been approved by the Health Committee, and will come into operation early in 1960. It is hoped that this will not only give the present staff of midwives some relief, but that it may attract younger midwives to take up work in the domiciliary field.

During the year, because of shortage of midwives, we have had to revert to the transfer of care of mother and baby delivered at home, from midwife to health visitor on the fifteenth instead of on the twenty-ninth day. As soon as the staffing position will permit, we shall again arrange for the midwife to supervise the mother and baby born at home, for the first month.

In view of the importance of detecting physical defects and emotional strains at an early age, we have endeavoured to stress particularly the value of periodic medical examination between babyhood and school age, at our Child Health Clinics. The latter description is, we consider, a better title than "infant welfare clinic," which may create the impression that the clinic exists to deal only with babies. Efforts should be directed at increasing the periodic check up of the pre-school child, so that it becomes an accepted custom.

The work of anticipatory guidance undertaken in the maternal and child health field, has expanded and become integrated with the child guidance service in a comprehensive "Child and Family Guidance Service."

The work of the Hearing Assessment Clinic has also increased, and in order to meet immediate needs for ascertainment and training, the Health Committee have decided to employ a teacher of the deaf on a full-time instead of a part-time basis, and to arrange for an additional consultant session. The importance of early detection and training of the young child with impaired hearing cannot be over-stressed.

In September of this year, Dr. Alison Craig, First Assistant Medical Officer in the Maternal and Child Health Section, retired after twenty-eight years' service in the Department. Dr. Craig worked in the Knowle area of the City, and also undertook a number of special duties in connection with the Children's Department, advising on the medical aspects of the adoption work and acting as medical officer to the Vinney Green Reception Centre and to Nore House and Greenhill Residential Nurseries. Dr. Craig was not only a doctor of outstanding ability, but by her charming and gracious personality endeared herself to mothers, children and colleagues alike.

Domiciliary Midwifery Service

Year			Bookings	Deliveries	Home Investigations	Follow-up of Patients from Hospital under 10 days	
						No.	Visits
1958	..	..	2,674	1,869	1,833	1,283	10,628
1959	..	..	2,472	1,727	1,744	1,449	12,117

Miss D. Gearing, Supervisor of Midwives, reports:

The year 1959 was an eventful one for the Domiciliary Midwifery Service in that it saw the beginning of the Bristol City District Training of Pupil Midwives for six months' district training, and the first three pupils commenced their training in September: from this service we hope to recruit future midwives.

The training of pupils in conjunction with Bristol Maternity Hospital has been continued.

A night rota system has been approved by the Health Committee and goes into operation shortly—this gives less hours on call, more free evenings off duty and less disturbed nights. This, we hope, will be an incentive to the recruitment of younger midwives to work in the domiciliary field.

During the year, the amount of work has been about the same, with fewer home deliveries, but more early discharges from hospital. While the number of full-time midwives (31 at 31st December, 1959) has remained the same, the sickness rate has been extremely high, half as much again as last year, so that the pressure on staff has been considerable.

We now have five part-time midwives and their work is invaluable, particularly in undertaking the nursing of patients discharged home early from hospital. Full-time and part-time midwives have combined to take an active part in teaching in parentcraft clubs run in association with all our ante-natal clinics.

Miss Pugh, Deputy Supervisor of Midwives, has continued to give talks to school-leavers, and instruction in midwifery first aid to ambulance and civil defence personnel.

Five midwives and the Deputy Supervisor attended post graduate courses during the year.

We have not had as many foreign midwives visiting the Department during the year, although we continue to train a number of foreign and colonial midwives.

The premature baby midwives continue to do good work and maintain a close association with the premature baby units at Southmead and the Bristol Maternity Hospitals.

Sub-Fertility Clinic

Dr. Norma Boxall, Medical Officer, reports:

Numbers of new patients	..	..	..	..	233
Attendances of old patients	..	..	..	..	1,168
Number of pregnancies reported during 1959	..	..	..	..	67

Family doctors are making increasing use of this Clinic, as shown by the increased number of patients sent to us.

The number of old patients' attendances has been reduced by making every endeavour to reduce visits; some routine tests have also been omitted and only kept for selected cases. The time so made available has been used for the time-consuming cases of marital difficulties, of which cases an increasing number is being seen.

Collaboration with Professor Lennon's Department, through the Consultant, Mr. Edwards, and with the Physiotherapy Department here, continues happily with great benefit to the patients and to the Clinic—medical students from the hospital have attended the Clinic practically every week for instruction.

During the past year, the problem of the unhappy marriage continues to exercise us, often not due to infertility or marital difficulties only, so that an effort has been made to improve contact with other bodies such as the Marriage Guidance Council, Probation Officers and the Children's Department. It would often be a tragedy to introduce a child into such an atmosphere unless improvement can be effected before its birth.

For the same reason, a close watch is being kept for ill-health in the would-be parents; a considerable number of cases of unsuspected illness have been found, including pernicious anaemia, hyperthyroidism, diabetes, essential hypertension, two cases of pelvic tuberculosis, and several cases of syphilis.

Dr. R. Irving Bell, who is responsible for the male sessions of the clinic, reports:

The number of new cases seen at this Clinic during 1959 was 102, and the total attendances 310.

The number of sessions were reduced from two to one with effect from April 13th.

An analysis of the new cases referred, indicates their source:

General Practitioners	56.9 per cent.
Female Subfertility Clinic	30.4 „ „
Hospitals and self requests	9.8 „ „
Marriage Guidance Centre and Family Planning Clinic	2.9 „ „

Comparing this analysis with that for the previous year (1958), the number of men referred by general practitioners has increased from 47.1 per cent to 56.9 per cent as above, and indicates again the continued use made of this Clinic by them.

Child Health Services

Child health sessions are provided at the fifteen main clinics in the City, and at nineteen subsidiary centres in church halls or community centres. With the kind co-operation of the hall committees concerned, it has been possible during the year to improve the facilities and equipment in these centres.

The child health clinics continue to make provision for advice to mothers on feeding and management of the infant and young child, for periodic medical examination, and for the various prophylactic inoculations. In addition, they provide an excellent opportunity for group health education on all matters affecting the family.

The Hearing Assessment and Training Clinic

This clinic started in its present form in the autumn of 1957 with special emphasis on the early ascertainment of deafness in young children.

Dr. Helen Gibb, Medical Officer, and Mrs. J. Stephens, Teacher of the Deaf, report as follows:

The Hearing Assessment team continues to meet on the fourth Wednesday of every month under the direction of Mr. H. D. Fairman, E.N.T. consultant. Mr. King, the psychologist, Dr. Gibb and Mrs. Stephens are the other members of the team. One full day per week is set aside for the preliminary investigation

and conditioning of children referred for diagnosis by Dr. Gibb and Mrs. Stephens. Two other sessions per week are used by Mrs. Stephens for pre-school auditory training and parent guidance.

Of the 786 children summoned, 558 attended. The incidence of absenteeism is high. We feel that there are several factors which contribute to this. The children who fail are usually very young and frequently come from families of several young children, and the mother has difficulty in arranging care for the other members of the family, especially young school children who have either to be taken to or met from school. Testing is obviously difficult when there are other young children present. Another factor mitigating against good attendance is the distance and cost of transport from outlying districts. The third factor is the delay between notification and first appointments. This is due to the number of children to be seen being in excess of the available clinical time.

We have been impressed once more by the importance of early diagnosis. The testing is easier and more conclusive during the first year of life. If the diagnosis of hearing loss is made then, emotional disturbances arising out of communication difficulties are diminished. The average age of children diagnosed as partially deaf at the clinic is between three and four years. By this time, there has been a considerable disturbance in the mother-child relationship. Hitherto there has been no adequate provision in the educational system for this type of child. Many parents, once help and guidance have been given from the teacher of the deaf are able to co-operate in the training of their child in his natural home surroundings, which is much to be preferred to early separation from mother. There are, however, many children of large families and difficult home background who do not receive the amount of training they need. The amount of hearing they have precludes them from the school for the severely deaf. Normal nursery school cannot give them the specialised help and training they need. It is for such children that the Nursery Unit for Partially Deaf Children is necessary.

During the past year there have been fourteen new children under five diagnosed as requiring hearing aids and auditory training:

(a) Children attending for regular auditory training	..	..	30
(b) No. transferred to ordinary school with hearing aid and help from peripatetic teacher of the deaf	..	..	7
(c) Transferred to schools for deaf	..	..	3
(d) Transferred to P.D.U.	..	..	3
(e) Transferred to Occupation Centre	..	..	1
(f) Transferred from Mental Hospital to School for Deaf	..	..	1
(g) Attending nursery classes with H.A.	..	..	5
(h) Referred for further investigation of probable aphasia	..	..	3

Some of the pre-school children who were investigated, belonged to the group with acquired conductive deafness. These children have had recurrent middle ear infections and have a slight degree of deafness only. If not recognised, this may lead to backwardness in attainments in verbal subjects. It is often difficult to detect this type of deafness in the early stages. Between acute episodes the child may hear normally. As this condition can be treated, it is important that it should be diagnosed, as the educational attainments lost in the first few years of school life are not easily recovered.

Day Nurseries

The demand for day nursery admission during the year has been high, and the majority of the nurseries have carried a waiting list, which has necessitated a constant review of cases to assess priorities.

The position at December 31, 1959, was as follows:

<i>Accommodation</i>	<i>Number on Registers</i>	<i>Number on Waiting Lists</i>
290 places	297	39

The contribution made by the day nurseries to the welfare of small children in special need cannot be overestimated. In cases of family illness, particularly involving the mother, for the child who comes from a home where the standards of care and feeding are poor, and for the child of the unsupported mother who is obliged to work, where the alternative would be separation of the child from the mother either in a residential home or foster home.

All the day nurseries are approved by the Ministries of Health and Education as training centres for nursery nurses—we value the close link which this gives us with the Education Department. We would also like to record our appreciation of the scheme by which each of our day nurseries is linked to a nursery school, so that the sisters and wardens can keep abreast of new education methods.

Ophthalmia Neonatorum

It has always been our policy, on receipt of notifications of ophthalmia neonatorum, to issue a special card to the midwife or health visitor concerned, who sees that the treatment ordered by the doctor is carried out, and continues to keep the case under close supervision until after the condition has completely cleared up.

This year, we have, for the first time in recent years, had two notified cases of gonococcal ophthalmia—fortunately, both were promptly diagnosed and treated, without any impairment of vision. In both cases, the mothers had failed to obtain ante-natal care.

These cases serve to remind us of the need for continued vigilance, especially in view of the recent increased incidence of gonorrhoea in this country.

Dental Care

Mr. J. McCaig, Senior Dental Officer, reports:

Facilities are available at all clinics for the dental inspection and treatment of expectant and nursing mothers and pre-school children. These patients are known as the priority classes and are referred by the doctors and health visitors at the clinics, to the dentist. Some avail themselves of the dental inspection offered, and of those inspected and requiring treatment, a high proportion accept treatment at the clinic. It is found that many of the pre-school children require extractions, and five times the number of teeth are extracted than conserved. This defeats our primary objective, which should be to concentrate on conservation of the deciduous molars. Of the 5,705 mothers attending the clinics (this is the total number of mothers seen by the clinic doctors, or by their own medical practitioners who visit the clinics), only 748 had a dental inspection by the clinic dentist. While staffing difficulties prevent us offering a 100 per cent service more inspections should be encouraged so that early carious lesions can be detected, and remedial measure advised. At this stage these patients are more receptive to advice, and no opportunity should be lost to educate and stress dental health. Similarly, with pre-school children, more inspections would mean earlier advice, and treatment of a less radical nature.

When we are able to approach nearer our aim, that is, to do more fillings than extractions, the work will be satisfying and rewarding, because, here surely is the field, where regular inspection and treatment is so very much required, for continuity of treatment in the future school years. This priority group also

has free access to the general Dental Service for treatment (except for the supply of dentures), but not many take advantage of the additional facilities offered.

Mothers attending the clinics, welcome the lectures and talks given by the oral hygienist on the prevention of dental caries. Once their interest has been aroused, they attend the clinics for scaling and polishing of their teeth, gum treatment and instruction on oral hygiene. This instruction is very important, tooth brushing, mouth rinsing and other methods of oral hygiene are more effective, after they have been demonstrated by the hygienist. It is generally contended that clean teeth and healthy gums are associated with a decrease in the incidence of caries.

In emphasising the importance of diet, mothers are advised, that while the correct diet is essential for good teeth, it is equally necessary to form a dietary regime. They are encouraged to see that they end a meal with foods of large fibrous contents, which have more natural cleansing actions, rather than sticky foods, which are liable to be retained, and stagnate between the teeth. A high protein diet is advocated, augmented with plenty of fresh fruit and vegetables, orange juice and cod liver oil, etc. Mothers are persuaded to try to reduce the taking of foods containing refined carbohydrates, as there is a close association between caries incidence and consumption of carbohydrates.

These methods of control have little chance to show their effect, proteins, fresh fruit and vegetables are expensive while foods containing carbohydrates are cheaper and more filling, thus more popular. Dental treatment is difficult to obtain in some areas, where there is a shortage of dentists and when obtained is prolonged, time consuming and with a certain amount of discomfort. Propaganda on dental health education, as allowed by the small amount of money allocated, has little effect.

In spite of all our methods of approach to the problem of dental decay, the incidence of caries is still increasing. More research is required, and should be put on a national basis. Here and there throughout the country, small teams of research workers are striving to find the solution, often ill-equipped, lacking finance and time. A strong national team is required, staffed with workers free from petty jealousies, local loyalties, suitably remunerated and with a single-mindedness of purpose—to find the cause of dental caries and solve this world-wide problem. What a boon this would be to human suffering. Dental disease is one of the most widespread of all diseases afflicting civilised communities, causing impairment of health, mutilation of the mouth, pain and misery.

“But thee—thou hell o’ a’ diseases—
They mock our groan.”

In the meantime, while awaiting the results of research, more could be done to spread the true facts of fluoridation. In a year or two, fluoridation will become a live issue, experiments in adding fluorine to drinking water are taking place in various parts of the country, and will be completed soon. More propaganda about these experiments and their possible success could help to create a more favourable opinion when the time comes.

It is universally accepted that where fluorides at the appropriate level are present in the drinking water, the incidence of dental caries is decreased. Here then is the method where success is likely to be achieved, if it is adopted. It requires no effort from the general public, neither pill taking nor injection, and expense involved would not be felt by the individual, in fact very little inconvenience at all.

Health Visiting Service

Miss L. M. Bendall, Chief Nursing Officer, reports:

In presenting this report for 1959, I felt the urge to take a backward glance before looking forward.

In 1956 my report dealt almost entirely with an account of the long-awaited Working Party Report on the field training and recruitment of health visitors.

In 1957, I made the point that arising out of the Working Party Report published in June of that year, the health visitor had received recognition as a medico-social worker; that she had been lifted out of the framework of the Public Health Nursing Staff and granted an additional monetary award by the Whitley Council.

In 1958 I stated that shortage of staff has restricted development to some extent.

Which brings us to 1959 when the Working Party recommendations are beginning to bear fruit resulting in an increased recruitment to the Health Visiting Service; for in 1958-59 the Bristol Training Course increased its number of students from nine to twenty-three. Twenty-one of these students were sponsored by the City to remain under contract until September, 1960. One of these left at the end of the course on health grounds, leaving twenty. I therefore found myself in July, 1959, faced with the task of integrating twenty newly qualified health visitors into the existing service, a task which at the time of writing this report is yet to be completed.

There has been for some time a real need for re-organisation due to migration from the City central areas to the housing estates on the periphery, but there has been little encouragement when I have been handicapped by staff shortage.

Each health visitor carries a district and with some exceptions is responsible for all the work which lies within her particular area. Health visitors are decentralised and are based at the branch health clinic nearest to their districts.

With this influx of twenty newly qualified, plus two newly appointed health visitors, I was able straight away to fill the empty districts, to take a look at case loads, to close districts in some cases and to create new ones where required. At the same time I was able to reduce the case loads.

In addition I was able to increase specialisation. I will refer to this later in the report. The question may well be asked, "What is meant by a case-load?" Although the health visitors' duties have been extended to include the family as a unit, it is true to say that the basis of her work is still the expectant and nursing mother and the young child. Indeed, the Working Party Report suggests that health visitors "should keep in touch with all families where there are children." Her handle of admission to a home is still the birth of a baby and her case load is the number of cards she holds for children of pre-school age, i.e., 0-5 years.

My aim is to reduce the case load to an average of five hundred per health visitor, a situation which I venture to say will compare very favourably with any area in the country. At this point I think I should remind the reader that the health visitor is also the school nurse, although there is no reference in this report to her school health activities.

The health visitors' duties continue to follow the usual pattern: (a) Home visitation; (b) Work in clinics, nursery schools and classes.

(a) Home Visitation

Previous reports have stressed the need of practising selective visiting because of staff shortage. However, with additional health visitors and consequent smaller case loads more frequent and regular home visits will be possible. At the same time extra supervision will still be given to families where there is a special need, either on medical or social grounds.

(b) Work in Clinics, Nursery School and Classes

The health visitors continue to be responsible for the organisation of clinics and give advice and health education in both ante-natal and child health clinics. Group teaching is carried out with the help of film strips and films.

The teaching of parentcraft continues to be a successful feature of the teaching programme and is much appreciated by the expectant mothers (and fathers) who attend. The course consists of seven lectures and demonstrations, with a final lecture to which the husbands are invited.

In addition health visitors take part in other aspects of health education to the various women's organisations, parent-teacher associations and in senior schools.

In nursery schools and classes children are kept under supervision with regard to infection and cleanliness and treatment of minor ailments. Health visitors are also present with the doctor at medical inspections.

Specialisation

A certain amount of specialisation has been practised in the health visiting sphere for many years and this has been extended this year to include work with spastics, mental health and in the school health field with physically and mentally handicapped children. Specialisation in the following is reported elsewhere in this Report: Blindness prevention (Section E), Infectious Diseases (Section A), Care of Chronic Sick and Aged (Section E).

Care of Premature Babies discharged from Hospital

Miss E. Room, Health Visitor, reports:

The health visitor from the staff of Southmead Hospital, in co-operation with whom this work is carried out, was on compassionate leave for nine months during 1959. Consequently the service was restricted to that which could be given by the health visitor from the Public Health staff. As a result, it was agreed that visiting should be restricted to the really small babies and those who had a "poor start." The larger and healthier babies who had made good progress in hospital were discharged direct to the district health visitor or midwife.

The visiting areas in Gloucestershire and Somerset were reduced and the babies in the most outlying areas were also discharged direct to the midwife or health visitor.

The County Supervisors were very co-operative during this period of staff shortage, their midwives being asked to give daily supervision until such time as the premature baby health visitor could pay a call. In this way the local

nurses and district supervisors were met more frequently than before and friendly relationships have been well established.

As a result of restricted visiting the annual totals have dropped. A total of 476 babies were visited, 357 within the boundary and 119 in Gloucestershire and Somerset.

The premature baby follow-up clinic held in Southmead Hospital Out-Patients Department was as busy as ever during 1959. There the babies are brought to be examined by a paediatrician, the first visit being made when they are three months old. By this age visiting the babies in the home has usually finished and following the "check up" in this clinic, they are discharged to the care of the district health visitor.

Spastics

Miss N. Paget, Health Visitor, reports:

I commenced the supervision of spastics in September, 1959, and found that the records contained adults, school children and pre-school children.

This report is concerned with the pre-school age group. I attend the Cerebral Palsy Assessment Clinic at the Children's Hospital and am thus brought into contact with newly diagnosed cases.

I divide the rest of my time between attendance at the Claremont School for Spastics and home visitation. At Claremont School there is a nursery class which caters for fifteen children. These children, although physically handicapped, are considered to be educable. They receive an intensive course of physiotherapy and speech training and need constant supervision, help, and treatment of minor ailments.

I have learned through my contact with these young children of the special problems they present to their mothers. This is very helpful when giving advice in the homes, for the parents need a great deal of understanding and encouragement in bringing up children so afflicted.

Refresher Courses and In-Service Training

In May 1959 twelve of our health visitors joined the Glamorganshire health visitors in a refresher course of one week's duration. This was held at Dyffryn House, Cardiff. In September, 1959, twelve Glamorganshire health visitors joined the Bristol staff in a refresher course at Wills Hall, also of one week's duration.

Every opportunity is taken to give health visitors in-service training by attendance at seminars, lectures, and much value is derived from the Area Case Committees and Case Conferences with psychiatrists and psychiatric social workers.

Ancillary Nursing Service

Clinic Nurses

Clinic nurses continue to give valuable service to the Department. These nurses are all State Registered and carry out routine nursing duties in clinics. In addition they have been of great value in connection with the poliomyelitis vaccination campaign during the year.

Tuberculosis Visitors

There are eight tuberculosis visitors, plus a sister-in-charge. They divide their time between home visiting and work in schools and clinics. Case discussions are held at regular intervals with medical staff.

Physiotherapists

An establishment of three full-time and two part-time physiotherapists has been maintained during 1959. Two of the full-time staff are concerned mainly with treatment of school children and attend the medical sessions with the orthopaedic consultants who order the necessary treatments which may include sunlight, remedial exercises and massage.

The third full-time physiotherapist is concerned in carrying out a programme of relaxation classes for expectant mothers in the various ante-natal clinics around the City. By arrangement with the Welfare Services Department, all three of these physiotherapists spend a limited amount of time carrying out treatment in the old people's homes in the City.

The two part-time physiotherapists are occupied in carrying out relaxation classes in ante-natal clinics.

Dental Attendants

Thirteen dental attendants including one who specialises in orthodontics comprised the establishment during 1959.

Clinic Helpers

An establishment of twenty-two was maintained during 1959. These helpers carry out various duties in the clinics, including treatment of skin conditions, cleansing of verminous heads, sale of welfare foods, dispensary, needle and syringe service and escorting of children to and from residential nurseries and schools.

Clinic Assistants

This scheme continues to be of great service to young girls who are desirous of entering the nursing profession and wish to bridge the gap until they are old enough to commence training. They assist trained staff in the various clinics and are given a course of lectures during their service.

Most of these girls enter and complete nurse training and they have a free choice of training school.

Night Watcher Service

This service completed its third year in December, 1959, and below is a comparison of figures over the three-year period.

		1957	1958	1959
		<i>Nights worked</i>	<i>Nights worked</i>	<i>Nights worked</i>
1st quarter	.. ..	103	302	305
2nd quarter	.. ..	91	233	232
3rd quarter	.. ..	142	242	277
4th quarter	.. ..	244	260	260
Total	.. ..	580	1,037	1,074

The night watcher service is designed to assist in the night care of chronic sick patients who are either living alone or whose relatives' health is becoming impaired through anxiety and loss of sleep. The Chief Nursing Officer is responsible for the administration of the scheme and recruitment of suitable night watchers.

The health visitors for the aged investigate and assess the need and there is the closest possible link with general practitioners and district nurses.

We have been fortunate in our recruitment of night watchers, for they are all mature women with good nursing experience and a kindly disposition.

There is no doubt that this is one of the most valuable services we render and one which is appreciated by the patients and relatives alike. It also helps to reduce the demand on hospital beds. Miss Newns, one of the health visitors for the aged, expresses the appreciation of relatives, who she says, "were so grateful and relieved that they could go to bed and sleep, knowing the patient could be well cared for during the night."

One patient who lived alone and discharged herself from hospital knowing that she had not long to live, was given all the services necessary to make her last days endurable, including a night watcher each night. Her last words to Miss Newns—and surely they sum up the situation perfectly—were, "Please thank everyone concerned for providing the services which enabled me to die in my own home."

Health Visitor Training

Miss M. Sangster, Principal Health Visitor Tutor, reports:

The Health Visitor Training Course 1958–59 finished on July 1, 1959—twenty-three students completed the course and twenty-two were successful in obtaining the Certificate of the Royal Society of Health. One student was unable to qualify because of ill health. Twenty of the new health visitors have remained in Bristol.

This course was the first one lasting an academic year, and it marked a great step forward in health visitor training in Bristol. There has always been adequate formal instruction and therefore it was not necessary to increase the number of lectures. The informal sessions have been greatly increased to give the students more opportunity to discuss, to exchange ideas and really absorb the information gained during lectures.

The whole success of a Health Visitors' Course depends on the co-ordination of practice and theory and we are fortunate in having a close link between the clinics and the training centre. The students welcomed particularly the opportunity of forming groups and discussing the problems they had met while visiting families. In this way they saw the practical application of the theory they were learning. On these occasions each group was joined by an experienced health visitor who was able to help the students by giving a really practical point of view.

The longer course also enabled the students to have a more satisfactory preparation for their work as health educators. There were some additional sessions with the staff of the Education Department of Bristol University, and to help the students put this into practice they undertook classes on health subjects with youth groups. The youth organisations welcomed classes given by trained nurses and the students gained confidence in group teaching.

The present course started on October 8, 1959, with twenty-three students; thirteen are sponsored by Bristol Corporation and have undertaken to remain as health visitors in the City for fifteen months after completing their training.

Student Nurses

During the year, lectures and visits were arranged for nurses in training at the hospitals in Bristol. These were appreciated by the nurses who were given an introduction to the services available to the community.

Clinic Assistants

Public Health and Community Services are becoming increasingly important in the syllabus of student nurses in hospital, therefore the classes given to clinic

assistants will help them considerably when they start their nurse training. They continue to have classes for a half-day each week with Miss P. M. Tarbuck, Assistant Tutor.

Rose Green High School

During the year Miss Tarbuck has been giving four sessions each week, at the school, to prepare sixth form girls for the General Certification of Education in Human Biology and Hygiene. There were ten students in the class and they were all successful in the examination held last July.

Home Nursing Service

Miss G. M. Grazier, Superintendent of Home Nursing, reports:

Staff—91 including			
Administrators	..	..	6
Queen's Nurses (including 3 males)	..	..	61
State Registered Nurses	..	..	4
State Enrolled Assistant Nurses	..	..	6
Student Queen's Nurses	..	..	10
Part-time Nurses	..	..	4
Number of cases nursed during year	..	..	7,458
Total number of visits	..	..	247,169

By comparison with 1958, it has been observed that in 1959, visits to patients aged 65 years and over have been fewer, while those to patients aged 45–64 years have increased. This could be accounted for by the increased incidence of terminal carcinoma within this age group being nursed at home. It has also been observed that there is an increase in the number of visits paid to diabetic patients.

There has been a constant increase in cases requiring full nursing care and pressure of work has been heavy in most areas.

It is gratifying to note that tuberculosis cases and visits continue to decrease. During the year an experimental shortened form of training was undertaken, conforming to the suggested syllabus put forward by the Queen's Institute for the Minister's approval. The result appeared to be satisfactory. Ten students were trained during the year.

During the course of the year 156 hospital student nurses accompanied members of the staff on a morning round on the district. We welcome this as an opportunity of showing potential future ward sisters that patients have an environmental background which could have a bearing on the cause and course of their illness.

Once again we would wish to express appreciation for the co-operation which continues between the Home Nursing and other domiciliary services, particularly the Home Help Section, Loans Section and the Health Visitors for the aged.

Physiotherapy in the Maternal and Child Health Service

Ante-natal exercise and relaxation classes are held in association with the mothercraft sessions, at the Health Clinics in the City, which provide ante-natal services. While these classes are intended primarily for those mothers who are expecting their first baby, mothers who have had a previous confinement sometimes ask to attend again for a "refresher course" and are very welcome in the group.

Miss B. S. Hogg, Physiotherapist, reports on other sections of the work:

Post-natal classes

An increasing number of mothers are being referred for post-natal exercises and faradic treatment, since with the aid of portable apparatus it has been possible to arrange these treatments at peripheral clinics.

Sub-fertility clinic

Relaxation treatments are continuing with some successful results.

The pre-school child

Cases of upper respiratory infections have been referred for sunlight, short-wave or breathing exercises and postural drainage. It has been possible to treat some of these chest cases at peripheral clinics, notably the William Budd Health Centre, as well as at the Central Clinic, thus saving the mothers and children from having to journey into the centre of the City.

Home Help Service

Miss M. R. Epplestone, Home Help Superintendent, reports:

During the year, 3,539 families have been supplied with a home help compared with 3,140 during 1958. The number of home helps employed on December 31, 1959, was 614 (602 part-time and 12 full-time).

The following type of cases have been helped:

(1) Maternity—including home confinements—early discharges from hospital, expectant and nursing mothers	..	..	..	..	..	..	152
(2) Chronic sick, aged and infirm	..	..	..	..	..	..	2,937
(3) Tuberculosis	..	..	..	..	..	..	25
(4) Others	..	..	..	..	..	..	425
							<hr/> 3,539

The service has been very active during the past year. With the addition of a second assistant superintendent, case worker and clerk a great deal more visiting has been done. Help has been increased or decreased according to need and more cases have been covered. There has been a very heavy demand on the service and only to the most necessitous cases has help been given; this has been very difficult at times to decide.

Emergency cases

These cases are referred direct to the Health Department by the general practitioners, health visitors, district nurses, almoners and relatives. A visit is paid within a matter of hours and help provided where there is no relative or other help available.

The number of families with young children to be cared for, because either the mother is ill in hospital or confined to bed at home, has increased considerably over the year. These cases tend to be of longer duration than others, as usually the mother has refused to believe that there is anything wrong with her until a crisis occurs. At one time during the year more than half the number of full-time home helps were engaged in child care cases; fortunately the home helps remained well and confinement bookings at the time were low.

Motherless families are covered until satisfactory arrangements can be made for the care of the family.

Aged and Chronic Sick

This panel has increased enormously during the year and causes considerable heartache to clients and staff alike. The demand has exceeded the supply throughout the year and not once has the "Awaiting Help" file been empty. The number of cases needing daily help has increased, and help is also given to several sick old people seven days a week including Bank Holidays, throughout the year.

Even though there has been an increase in the number of home helps employed during the year it is still only possible to give a minimum amount of time to each patient. The general practitioners are always most helpful and co-operative at all times in giving their opinions on the medical need, and I would like to take this opportunity of thanking them.

Tuberculosis

The number of cases requiring home help because of tuberculosis has decreased considerably from 72 in 1958 to 25 in 1959.

Others

Included in this category are the acute sick, mentally sick and special families. Cases of mental illness are successfully being covered by specially selected home helps and it is foreseen that more cases will in future be referred to the Department for help. The psychiatric social workers have referred the cases on discharge from hospital and have been most helpful and co-operative in every way. There has been a slight change in the pattern of work during the year. The City has been divided into four districts so that each case worker now has her own district and the patients look forward to her visits, which are frequent. Their patience and helpfulness in dealing with the aged and chronic sick, especially in money matters is most commendable and I am indebted to them for their service.

Recruitment

Recruitment throughout the year has been good. Many a potential home help has been turned away owing to the restricted establishment.

There is a need for expansion of the service to include resident home helps for the care of children when the mother is ill or being confined in hospital: and for home helps to be available during the evening to give extra attention to the very frail and sick, especially during the winter months.

Special Families

Work on behalf of "special families" is carried out by the district health visitors, by a special team consisting of a medical officer and four special health visitors, and by the Family Service Unit acting as an agent of the Health Department.

Dr. C. D. Hopkins, First Assistant Maternal and Child Health, reports:

In this third year of working as a specialised section of the Maternal and Child Health Service, it is possible to define the particular need that called for its existence.

The Special Families Register is made up of families who are unable to withstand the stresses of day to day living. Normally, they are recognisable only when they become a liability, or are delinquent, or, otherwise, a nuisance to the community. The contemporary social setting will, in some instances, determine whether or not a family will be included in the category. The aim

of our service is to render help to a family while its ability to deal with its difficulties is weakening and is not yet greatly impaired.

As contrasted with 750 families in 1958, this year there are 820 considered to be a special risk, 645 of these are supervised by general health visitors, and the remaining 175 are the concern of the four special health visitors, and require intensive support.

During the year, the special health visitors paid 5,803 domiciliary visits, and also visited hospitals, general practitioners and other social agencies on behalf of these families.

Direct assistance is given to the families through the use of the routine Maternal and Child Health Service. Indirect assistance is obtained through liaison with the various social agencies and this is closely associated with the work of the six Area Co-ordinating Committees. These committees have been in operation since the beginning of 1956, and by December 31, 1959, consideration had been given to 488 families.

During the year, the greatest difficulties have been encountered where mentally disabled parents have been at home and caring for their young children. With the close co-operation of hospital doctors and general practitioners it has been possible to help some of them. However, if special provision is not made for such parents, their children, in the near future, are going to suffer unavoidably, unnecessarily and quite considerably.

It is interesting to observe how well some mothers and their children have responded to rehabilitative training in the kindly and sheltered environment at Brentwood in Cheshire, and at the Mayflower in Plymouth, only to relapse on returning to the open community. This suggests a possible place for the permanent residential unit planned so as to include both parents, and supervised by friendly wardens to meet the needs of certain families.

Mr. A. Strange, Organiser Bristol Family Service Unit, reports:

During 1959, the unit, which provides a casework service for families in special difficulties, helped 53 families in the Southmead, Horfield and Henbury areas.

Thirteen cases were opened, including referrals from the Health Department (3), Co-ordinating Committee (3), Prison Welfare (1), Forces Help Society (1), Corner Cottage Settlement (1), Mental Hospital (1) and personal enquiries (3). Home visits totalled 3,253 and official enquiries on behalf of families 1,650. In addition to these figures, 602 interviews and enquiries were carried out in respect of individual requests for help or advice.

Of the 42 cases still open at the end of the year, 9 had been known to the Unit since 1953-54 (3 of these had been closed for a period and then re-opened). Of the current caseload the referral figures for each year were as follows:

1953 (6), 1954 (3), 1955 (1), 1956 (1), 1957 (9), 1958 (11) and 1959 (11).

This record seems to confirm that the average length of contact with families is between 2-2½ years in cases where fairly intensive help seems necessary, with the Unit carrying a residue of long-term cases at any given time.

The fact that the Unit premises are situated in the area in which the service operates does appear to have some significance in the work. The gradual identification with the community which has developed over the past few years has introduced a social factor into the work which in a somewhat unobtrusive way has made for easier and more natural relationships with families in the neighbourhood.

In examining the use made of the service one must accept that in the main, families see or experience their problems in practical and tangible terms.

Requests for help in the form of clothing, bedding, furniture and financial aid are frequently made. Practical help is not often directly asked for, although in times of illness or stress parents accept the services of the worker with whom they have personal contact. This form of help is often accepted on the initiative of the worker if it is offered with a real concern and proper respect for the person being helped. Another means of stimulating interest in practical jobs in the home is through the loan of gardening tools, decorating equipment, etc., which the Unit holds in store.

A further use of the service is in seeking information concerning the medical, educational and social services as well as in dealing with official communications, appointments, etc. Often the Unit acts as an intermediary between the family and the statutory and other services in such matters as settling debts, payments of rent, making claims to the National Assistance Board or other departments.

The social side of the work has its valuable contribution to make in the form of children's holidays, outings and other events all of which are supported almost wholly by private hosts and voluntary helpers. In the case of mothers who have felt isolated and depressed, an occasional visit to the Unit for a personal contact with a worker has helped the mother's morale and a further development of this has been the regular visit to the Unit one afternoon each week of four or five mothers to do dressmaking and mending.

In conflicts within the home and with the community and authority outside, families will frequently turn to the Unit for understanding and support. It is within the tolerant and accepting relationship with the Unit over a period that mutual confidence and trust may be established which enables parents to bring forward problems which in another setting it may be difficult for them to discuss or recognise. The whole process of "doing things" in tangible and material forms generally conveys the impression of a helpful and realistic service and this enables the worker to be more direct in her approach to problems in taking the initiative with less risk of appearing critical or damaging to the individual's self respect.

It is planned to draw up a more complete analysis of the degree to which the various forms of help have been used by families and it is hoped that this study may be of interest to future developments for rehabilitative or supportive services in a community setting.

Mrs. F. Bodman (psychiatric social worker) has continued to visit the Unit monthly to have consultations with the workers whilst, as in previous years, the Unit has received valuable support from officers and fieldworkers of both the statutory and voluntary agencies.

Talks on the work of the Unit were given to groups of social science and probation students. Visitors to the Unit during the year included social workers from the United States, Burma, Australia and Rhodesia.

Welfare of Unmarried Mothers

During the year, 516 unmarried mothers were assisted by Miss M. Reed, Welfare Officer to the Maternal and Child Health Section.

Miss Reed comments, "Parents are proving to be less ready to help the girl who is in trouble, as often both parents are at work. There has been a resulting increase in the cases where a young mother sets up home with the father of her expected child, an arrangement which usually soon breaks down.

The restless, unstable girl needs help over a long period and often relies entirely on the Department to provide this."

The evening ante-natal clinic held at Central Clinic for unmarried expectant mothers is meeting a real need, particularly for girls who are still at work. Miss Hogg, the physiotherapist, gives instruction in relaxation and ante-natal exercises both at this clinic and at our Mother and Baby Home.

During the year, 45 mothers were admitted into our Mother and Baby Home, Snowdon Road, and 10 mothers were admitted into Voluntary Homes.

STATISTICS

Table I—Maternal and Child Health

Live births (Bristol mothers) (from Birth Registrations)	6,663
Live birth rate	15.26
Stillbirths (from Birth Registrations)	134
Stillbirth rate per 1,000 total (live and still) births	19.71
Total births (live and still)	6,797
Infant deaths	130
Infant mortality rate per 1,000 live births	19.5
Infant mortality rate per 1,000 legitimate births	18.9
Infant mortality rate per 1,000 illegitimate births	31.1
Neo-natal mortality rate (first 4 weeks) per 1,000 related live births	14.0
Illegitimate percentage of live births	4.8
Maternal deaths	2
Maternal mortality rate per 1,000 total births	0.29
Number of live premature births	497
Number of live and still births at home (from Birth Notifications) ..	1,727
Number of live and still births in institutions (from Birth Notifications)	5,194

N.B.—The above figures relates to Bristol residents.

<i>Clinic Attendances:</i>	<i>New</i>	<i>Total</i>
(a) <i>Ante-natal clinics—</i>	<i>Patients</i>	<i>Attendances</i>
(i) Medical Officers' sessions	1,008	7,281
(ii) General practitioners	3,065	23,324
(iii) Consultant sessions	3,311	7,224
(iv) Midwives' sessions	158	4,439
(b) <i>Post-natal clinics—</i>		
Medical Officers and General Practitioners ..	3,458	4,835
(c) <i>Child Health Centres—</i>		
(i) Total number of infants under 1 year		5,445
Total attendances of infants under 1 year		62,195
(ii) Total number of children 1-5 years		9,564
Total attendances of children 1-5 years		24,274
(d) <i>Special diagnostic clinic—</i>		
New patients		233
Attendances		560

Health Visitors:

<i>Home Visits —</i>		
Ante-natal		1,630
Primary		6,555
Infants under 1 year (excluding primary visits)		30,652
Children 1-5 years		56,932
Sessions attended—Clinics		5,041
Nursery schools and classes		1,437 hours

Recuperative Convalescence

Mothers accompanied by children	30 mothers
	64 children
Unaccompanied children admitted to—	
(a) Jan Smuts Convalescent Home	16
(b) Other Homes	Nil
Adults (including 132 over 65 years)	191

Welfare of Unmarried Mothers

Number admitted to Snowdon Road Home	45
Number admitted to other Mother and Baby Homes	10

Table 2—X-Ray Section

The following are the numbers of X-rays carried out at the Central Health Clinic during 1959:

<i>School Health Service</i>	1959	1958
Referred from Minor Ailment Clinics, etc.	297	465
Referred by consultants:		
E.N.T.	634	
Orthopaedic	231	865
Teachers' periodic X-Rays of chest . .	741	767
<i>Tuberculosis Service:</i>		
Adult contacts	128	
Child contacts	1,008	
Children inoculated with B.C.G. . .	2,192	3,328
		3,485
<i>Maternal and Child Health Service:</i>		
Children under 5	16	
Mothers—X-Rays of chest	3,841	
Mothers—X-Rays of abdomen	153	4,010
		4,229
<i>Staff Medical Examinations and Periodic X-Rays (excluding Teachers)</i> . .	2,778	2,889
<i>Miscellaneous</i>	131	102
Total No. of Films taken	12,150	12,856
Total No. of Persons X-Rayed	11,102	11,830

Table 3—Dental Treatment

	<i>Examined</i>	<i>Requiring Treatment</i>	<i>Treated</i>	<i>Made Dentally Fit</i>
Expectant and nursing mothers	748	717	662	609
Children under 5	1,094	1,023	1,006	1,006
	<i>Scalings and Gum treatment</i>	<i>Fillings</i>	<i>Silver Nitrate</i>	<i>Crowns or Inlays</i>
Expectant and nursing mothers	360	1,120	9	2
Children under 5	—	337	775	—
	<i>Extractions</i>	<i>General Anaesthetics</i>	<i>Dentures Full upper Partial or lower</i>	<i>X-rays</i>
Expectant and nursing mothers	1,198	230	101	73
Children under 5	1,643	857	—	—

Table 4—Inoculations

	1958			1959		
	Local Authority	General Practitioners	Total	Local Authority	General Practitioners	Total
<i>Diphtheria</i> (whether combined with Whooping Cough and/or Tetanus or not)						
Full Course: Under 5 years of age	3,380	2,105	5,485	3,413	2,073	5,486
Between 5 and 15 years of age	51	47	98	65	46	111
Booster dose: Under 15 years of age	1,348	805	2,153	977	779	1,756
<i>Whooping Cough</i> (whether combined with Diphtheria and/or Tetanus or not)						
Full Course: Under 5 years of age	3,310	2,083	5,393	3,378	2,078	5,456
Between 5 and 15 years of age	31	45	76	51	35	86
Booster dose: Under 15 years of age	879	644	1,523	808	699	1,507
<i>Tetanus</i> (whether as Tetanus-Diphtheria-Whooping Cough Triple Vaccine or not)						
Full Course: Under 5 years of age	3,137	1,769	4,906	3,364	1,816	5,180
Between 5 and 15 years of age	17	53	70	54	61	115
Booster dose:	148	252	400	214	415	629
<i>Diphtheria Immunisation</i> (whether combined with Whooping Cough and/or Tetanus Immunisation or not)						
Six months ended 30th June	2,733	45	2,778	2,668	49	2,717
Six months ended 31st December	2,752	53	2,805	2,818	62	2,880
<i>Whooping Cough Immunisation</i> (whether combined with Diphtheria and/or Tetanus Immunisation or not)						
Six months ended 30th June	2,674	34	2,708	2,652	31	2,683
Six months ended 31st December	2,719	42	2,761	2,804	55	2,859

Table 5—Smallpox Vaccination

Age at time of Vaccination	Number of persons vaccinated (or re-vaccinated)			
	1958		1959	
	No. vaccinated	No. re-vaccinated	No. vaccinated	No. re-vaccinated
Under 1 year ..	2,042	236	2,130	224
1—	135	8	270	30
2—	98	19	134	38
5—	132	50	147	62
15 years and over ..	189	281	156	259
Totals	2,596	594	2,837	613

Table 6—Vaccination against Poliomyelitis*During 1959:—*

Year of Birth	Primary Courses	Booster
1954–1959 ..	8,436	11,665
1943–1953 ..	11,758	47,379
1933–1942 ..	27,327	10,387
Before 1933 ..	2,256	1,663
Totals ..	49,777	71,094

Since Inception of Poliomyelitis Vaccination:—

1954–1959 ..	24,812	11,783
1943–1953 ..	67,459	48,965
1933–1942 ..	32,612	10,387
Before 1933 ..	5,097	1,667
Totals ..	129,980	72,802

Table 7—Annual Return from Dispensary

1958		1959
<i>Establishments Served:</i>		
35	Health Centres and Clinics	35
27	Residential Institutions	27
	Day Nurseries, Day Special Schools, Nursery	
38	Schools and Classes	38
23	Other Establishments	24
36	Municipal Midwives and Pupils	39
754	School First Aid Sets	687
2,023	Gas and Air Apparatus Servicing	1,680
<i>Turnover of Drugs, Dressings, etc.:</i>		
275	Mixtures made	Gals. 243
469	Ointments made	lbs. 474
11½	Powders made	lbs. 23½
526½	Other Medicines Dispensed	Gals. 510
50	Vitamin A and D Emulsion	Gals. 66
1,380	Diphtheria Prophylactic, F.T., T.A.F.	mls. 1,750
3,620	Combined Diphtheria—Whooping Cough Vaccine	mls. 3,060
20,660	Tetanus—Diphtheria—Whooping Cough Vaccine	mls. 23,160
1,780	Whooping Cough Vaccine	mls. 1,060
542	Tetanus Toxoid	mls. 925
—	Poliomyelitis Vaccine	mls. 220,587
536	Lint	lbs. 460
851	Cotton Wool	lbs. 1,102
<i>Bulk Purchase of Drugs:</i>		
397½	Kgm.	Kgm. 549
1,404	Litres	Litres 1,167
965	Tabs (1,000)	Tabs. 1,502

THE MENTAL HEALTH SERVICES

Dr. H. Temple Phillips,

(*Chief Assistant Medical Officer of Health and Senior Medical Officer for Mental Health*)

and

F. Morton

(*Mental Health Officer*)

Introduction

The year 1959 will long be remembered as one of progress in matters concerning mental health.

The eighteenth century solution to the problem of the mentally ill was to lock them up in "madhouses." In the nineteenth century "lunatics" were sent to "asylums." During the first half of the twentieth century the "mentally ill" have been helped by enlightened forms of treatment in "mental hospitals." The second half of the twentieth century will undoubtedly be known as the period in which "mentally disordered" patients will be treated without formality and often without removal to hospital.

The Mental Health Act, 1959, has now received Royal assent. This has followed surprisingly rapidly upon the publication in May, 1957, of the Report of the Royal Commission on the Law Relating to Mental Illness and Mental Deficiency. The Act is planned to bring the treatment of mental disorder as far as possible into line with the treatment of physical illness, and lays emphasis upon the need for a considerable expansion of the community mental health services.

The sweeping nature of the proposed changes, and the speed with which the new legislation has been introduced, can undoubtedly be attributed to the awakened public interest in, and increased understanding of, mental health problems. The new legal and administrative provisions are in step with the modern concept of mental disorder, and with the vast progress which has been made in medical knowledge and methods of treatment in recent years. When the *Lunacy Act, 1890*, and the *Mental Deficiency Act, 1913*, with their emphasis on detention and custodial powers are finally superseded, a great opportunity will present itself to destroy the stigma which has always clung to mental disorder.

There is no commencement date laid down in the Act itself. Different dates will be appointed by order under section 153 of the Act for the introduction of specific sections. In this connection, several important circulars have been issued to Local Authorities by the Minister of Health during 1959.

On August 7, 1959, in Circular 22/59, the Minister of Health directed that as from the coming into operation of Section 6 of the *Mental Health Act*, Local Health Authorities shall provide services for the mentally disordered under section 28 of the *National Health Service Act, 1946*, including the following:

- (a) the provision, equipment and maintenance of residential accommodation and the care of persons for the time being resident in accommodation so provided;
- (b) the provision of centres or other facilities for training or occupation, and the equipment and maintenance of such centres;
- (c) the appointment of officers to act as mental welfare officers;
- (d) the exercise by the Local Health Authority of their functions under the Act in respect of persons placed under guardianship (whether so

placed under the guardianship of the Local Health Authority or of other persons); and

- (e) the provision of any ancillary or supplementary services for the benefit of mentally disordered persons.

On October 12, 1959, circular 28/59 was issued by the Minister, directing local authorities to submit proposals for making these arrangements.

Circular 27/59, dated October 1, 1959, was accompanied by the Mental Health Act, 1959 (Commencement No. 1) Order, bringing into operation that part of the Act which permits designated mental hospitals, licensed houses, and nursing homes to receive patients who are not unwilling to be so admitted on an informal basis. It is therefore now possible for all classes of mentally disordered persons to enter hospital for treatment with as little formality as they would experience if they entered general hospitals.

During 1959 much progress has been made towards the provision of a new training and industrial centre for mental defectives. This scheme has now been sanctioned by the City Council and formal approval of the plans by the Minister of Health is expected early in the new year. It is hoped that building will commence in the summer of 1960. The intention is to provide training accommodation for 390 children and adults, including a special care unit for 40 children suffering from multiple handicaps. Residential places will be established for 20 children so that short or long term care can be arranged when the need arises.

It is anticipated that when the training centres are removed from Marlborough House, some of the vacated accommodation will be used as a hostel for male mentally subnormal persons, and that extra rooms will also become available as offices for administrative and welfare staff, who are present working under extremely overcrowded and unsuitable conditions.

Organisation and Staff

The Health Committee of the Council is responsible for the control of the Mental Health Services, and has established a Mental Health Sub-Committee. The Chief Assistant Medical Officer is responsible to the Medical Officer of Health for the medical direction of the service.

The approved establishment of the service is set out in the following table:

<i>Medical</i>			<i>Establishment</i>	<i>Staff at 31/12/59</i>	<i>Whole or part time</i>
Certifying Medical Practitioners	..	..	2	2	employed on a sessional basis
*Consultant Psychiatrists	..	..	3	3	part time
<i>Non Medical</i>					
Mental Health Officer	..	..	1	1	whole time
Deputy Mental Health Officer	..	..	1	1	" "
Mental Welfare Officers	..	..	6	5	" "
Assistant Mental Welfare Officers	..	..	2	—	" "
Mental Health Workers	..	..	2	2	" "
*Senior Psychiatric Social Worker	..	..	1	1	" "
*Psychiatric Social Workers	..	..	6	3	" "
*Psychiatric Social Worker	..	..	1	1	part time
Senior Clerk	..	..	1	1	whole time
Clerical Assistants	..	..	3	3	" "
*Clerical Assistants	..	..	1	1	" "
*Shorthand Typists	..	..	4	4	" "
Shorthand Typists	..	..	2	2	" "
*Employed in Child and Family Guidance Service (joint service with Local Education Authority).					

					<i>Establishment</i>	<i>Staff at 31/12/59</i>	<i>Whole or part time</i>
<i>Occupation/Industrial Centres.</i>							
Occupation Centre Supervisor	..	..			1	1	whole time
Occupation Centre Assistant Supervisors	..	..			11	11	" "
Psychologist	..	..	..	..	1	1	part time
Speech Therapists	..	..	..	..	3	3	" "
Teacher of the Deaf	..	..	..	..	1	1	" "
Nursing Sister	..	..	..	..	1	1	" "
Industrial Centre Instructor (Senior)	..	..			1	1	whole time
Industrial Centre Instructors	..	..			4	4	" "
Occupational Therapist	..	..	..	..	1	1	" "
Caretaker Handyman	..	..	..	..	1	1	" "
Domestic Helpers	..	..	..	..	5	5	part time
Guides	..	..	..	..	7	7	" "
Cleaners	..	..	..	..	2	2	" "

During the year there have been a number of staff changes, and particular mention should be made of the retirement of Mr. A. J. Hewlett and Mr. A. J. Sanders, Mental Welfare Officers. Both officers have given long service to the Authority, first as Relieving Officers and later as Duly Authorised Officers. The vacancies thus created were filled by Mr. C. D. Fisher and Mr. E. W. C. Peirce, regraded from Assistant Mental Welfare Officers. Mr. A. J. Stephens and Miss J. Curtis were appointed to the posts of Assistant Mental Welfare Officer to take up appointment early in 1960. Approval was given during the year to the appointment of an additional Mental Welfare Officer, but this post has not yet been filled.

Mrs. J. Vant, part-time Psychologist, resigned in April, and Mrs. A. E. Sedgley was appointed in her place.

Among the occupation centre Assistant Supervisors, two resigned and the vacancies were filled. Two additional posts of Assistant Supervisors were created and filled during the year.

Training Courses

A refresher course for officers engaged in the Mental Health Service was held in Bristol from 6th to 10th April, 1959. This course was arranged by the Public Health Department in collaboration with the University of Bristol, and four members of the staff were authorised to attend.

On the 19th and 20th March, 1959, the Vice-Chairman of the Health Committee, the Chief Assistant Medical Officer of Health, and the Mental Health Officer, attended the National Association for Mental Health annual conference in London, the theme of the conference being "The Place of Work in the Treatment of the Mentally Disordered."

A refresher course for teachers of the mentally handicapped was held in London from the 23rd to 31st July, 1959, this being organised by the National Association for Mental Health. The supervisor of the Occupation Centre was authorised to attend.

"Mental Health Today and Tomorrow" was the subject of a conference arranged by the Royal College of Nursing. This took place in London on the 28th, 29th and 30th of October, 1959, and was attended by the specialist health visitor for mental health aftercare.

In conjunction with the West Bristol Institute of Further Education, the course of lectures which in past years has been so well received by parents of mentally handicapped children, was again held. This course is designed to make available to parents, and particularly fathers, of mentally handicapped children, the help and advice of experts, and so to enable them to meet the difficulties involved in the training and development of the child in its own home. It is also designed to help parents to co-operate in the training which

the child may be receiving in the Local Health Authority's occupation centres for the mentally handicapped.

It is to be regretted that no national form of training has yet been organised for mental welfare officers, although both employing authorities and the officers' own professional associations have recognised the need for this and have sought the Minister's approval to such a scheme. The report of the Working Party on Social Workers in the Local Authority Health and Welfare Services has now been published, and suggests the setting up of a National Council for Social Work Training. Even if the recommendations of the Younghusband Working Party are adopted, training on a national basis cannot be expected to commence for some considerable time. In the meanwhile, it may be necessary for the Local Health Authority to organise their own training scheme.

In-service training of Assistant Mental Welfare Officers has been carried out within the Department. This course consists of a comprehensive study of all aspects of the work in relation to the Lunacy, Mental Treatment, and Mental Deficiency Acts, as well as secondment for experience to mental and mental deficiency hospitals in the area.

We have also been pleased to welcome many students, including post-graduate students, medical students, social science students and those from the training colleges, as well as many visitors from home and abroad.

Officers of the Department have continued during the year to provide many talks and lectures to a variety of organisations throughout the city and, in this connection, the film "Marlborough House" has proved to be an invaluable visual aid in health education.

Mental Deficiency

At the end of 1959 the number of mental defectives known to the Local Authority was 1,781. This represents a total mental deficiency rate of 4.1 per 1,000 of the estimated mid-year population—the same figure as that recorded in 1958. The following table shows details of the number of mental defectives under care since 1949:

<i>Year</i>	<i>In Hospital and on Licence</i>	<i>Under Statutory Supervision</i>	<i>Under Guardian- ship</i>	<i>Receiving Voluntary After-Care</i>	<i>Pending Formal Ascertainment</i>
1949	676	736	65	72	29
1950	678	804	56	116	24
1951	685	857	54	147	17
1952	670	876	43	210	15
1953	665	932	51	105	58
1954	657	972	46	113	59
1955	669	1013	42	116	47
1956	678	962	40	91	24
1957	683	911	41	107	30
1958	704	923	12	125	38
1959	703	908	10	125	35

During the year 114 cases were reported as mentally defective and these were referred from the following sources:

General Practitioners	..	..	..	..	..	1
Courts	..	..	..	..	..	3
Local Education Authority	..	..	..	..	..	86
Other sources	..	..	..	..	..	24

They were dealt with as follows:—

Admitted to hospital	..	..	..	..	..	14
Placed under Statutory Supervision	..	..	..	..	..	57
Action not yet taken	..	..	..	..	..	35
Action found to be unnecessary	..	..	..	..	..	7
Died before action could be taken	..	..	..	..	..	1

Waiting List

At the commencement of 1959 there were 28 names on the list of persons awaiting admission to mental deficiency hospitals, and during the course of the year 22 names were added. Of this total of 50, 18 were admitted to mental deficiency hospitals; one child's name was removed from the list at the parents' request, and another child's name was deleted following the family's removal from Bristol. This left a total of 30 awaiting admission at December 31, 1959.

In addition to the 18 patients admitted to mental deficiency hospitals from the waiting list, it was necessary to admit a further 25 as matters of urgency, making a total of 43 admissions during the year. The following table shows the method of admission:

	<i>Male</i>	<i>Female</i>	<i>Total</i>
Informal	13	12	25
Section 3	3	4	7
Section 6	3	2	5
Section 7 (1) and (2)	1	—	1
Section 8	5	—	5

Temporary care under the provisions of Ministry of Health Circular 5/52 was arranged in 44 cases, as follows:

	<i>Male</i>	<i>Female</i>	<i>Total</i>
At Stoke Park Hospital	4	9	13
At Hortham-Brentry Hospital	15	13	28
Others	—	3	3
Totals	19	25	44

Difficulty in admission has been experienced, particularly with regard to young children and adult males, but it has been possible in many instances to arrange attendance at Mental Deficiency Assessment Clinics. Subsequent treatment recommended by the consultant psychiatrist to the general practitioner has often resulted in alleviation of many of the problems and admission to hospital avoided.

As a result of informal admission, it is now possible for persons to be admitted to hospital without reference to the Local Authority, and in some cases children who have not been ascertained as mentally defective are being admitted to mental deficiency hospitals.

Marlborough House Occupation/Industrial Centres

At the end of the year the total number of patients on the register was 273. These were as follows:

	<i>Male</i>		<i>Female</i>		<i>Total</i>	
	<i>Under</i>	<i>Over</i>	<i>Under</i>	<i>Over</i>	<i>Under</i>	<i>Over</i>
Occupation Centre	16	16	16	16	16	16
Industrial Centre	67	—	52	66	119	66
	1	87	—	—	1	87

There was an average daily attendance of 225 (132 male and 93 female).

The degree of overcrowding in both the Occupation and Industrial Centres has increased during the year, and the need for places will be intensified by the new legislation which will enable attendance of children to be made compulsory. As a long-term policy, a purpose-built centre is being provided, but this will not be available before 1962-63. In the meanwhile some additional accommodation may have to be found as an interim measure.

Medical Care

Regular routine medical examinations have been carried out on all children and adults attending the centres, by medical officers of the Department. Arrangements have been made for the annual dental inspection of all those attending the Centres and treatment has been extended to those children requiring it. Vaccinations against poliomyelitis have been given at Marlborough House by medical officers, to children whose parents have consented.

Special Care Unit

The Special Care Unit has continued to function and serve the very useful purpose of providing day training for children suffering from multiple handicaps, besides providing parents with a rest from the strain of continually looking after them in the home. Since the introduction of this unit in 1956, 16 children have been catered for.

The accommodation provided for this purpose at Marlborough House is totally inadequate, owing to the fact that space is limited and no bathroom and sluicing facilities are available. During the year the Health Committee approved the setting up of a Special Care Unit in association with a residential training unit, as part of the proposed new training centre at Hengrove. In the spacious new unit it will be possible for parents to attend for part of each day so that they can themselves receive instruction in the care of their children.

Psychologist's Report

Mrs. A. E. Sedgley reports:

The work during the latter half of 1959 has been continued as previously, and has included routine testing of children admitted to the Centre. Testing has also been carried out for special reasons connected with behaviour problems; also testing of older boys and girls where there has been a possibility of employment.

In all, about forty tests have been given during this time (May to December, 1959), and six outside assessments have been made of patients in hospitals or in their homes.

Experimental discussion groups with older patients have been continued with a view to general group therapy. One aspect of this is the provision of opportunities for members to develop—with some guidance—opinions on a variety of everyday topics, and to give practice in the verbal expression of such opinions in the presence of others. Another of the aims of this activity is that, in recording, as playlets, short imaginary episodes, within the experience of the members, attention may be focused on a large variety of situations which include debatable kinds of behaviour and attitudes to society. The end in view is to encourage and increase a feeling of social responsibility as members of a larger community outside the home and Occupation Centre. It is hoped to have regular meetings on these lines with both boys and girls.

Individual therapy has been undertaken in the case of one boy who, although of comparatively high intelligence and with the capacity for speech, has over a long period rejected attempts to get him to communicate through conversation with his fellows. This boy has been seen frequently for some months, with the idea of building up his self-confidence. Suitable reading material, at first of his own choice, has been used with the aim of accustoming himself to the sound of his own voice. The emotional difficulty he is experiencing—which may be in part due to desertion by his mother when he was twelve years old—has been discussed with him in an effort to reduce his apathy and sense of being rejected.

The extra attention given to him has produced a willingness on his part to co-operate. He is now receiving individual help with speech therapy, and he

takes part in special reading and writing classes with other high-grade boys and girls.

With the development of normal use of speech, he should easily be able to obtain employment in ordinary life.

Speech Therapy

A full-time speech therapy service is provided by three therapists working on a sessional basis. Their reports are as follows:

Miss K. Coleman:

Work at Marlborough House has proved interesting, as work with handicapped children always does.

Some children referred are not yet ready to benefit from speech therapy, although their speech is negligible; others having speech adequate for their needs are best left as they are, as work to improve their speech is so difficult for them. Several children work well, and do a good lesson by normal standards, taking pleasure in what they accomplish. But not having the facility to use this practice as easily as normal children, they will take longer to consolidate what they are learning. With these children it would be interesting to see the result of daily, or twice daily lessons.

Of particular interest are two cases:

1.—A girl in the infant class. Her speech is often unintelligible, but when interested she speaks with a recognisable pattern, initial consonants being omitted. Her command of the language is very good, and her association is good. She knows colours, and when interested works with application at whatever she is doing. Work on speech has not yet been possible, for there appears to be a severe anxiety overlying her speech, and until this is relieved, work on speech will not be possible. Work of this nature is done at the clinic at St. Paul's in the playroom, and it would be interesting to see how this child would respond were such facilities available for her.

2.—A fourteen-year-old boy who does not speak, gave the impression of a "voluntary mute." In an attempt to babble, he seemed unable to bring his lips together voluntarily, so another method was attempted. After a few weeks, words were spoken and objects in pictures recognised. Then came spontaneous speech. Another boy (a friend of his) came in with him, and on the second occasion this was arranged, he spoke continuously for the whole session—normal, intelligible sentences, spoken with complete freedom. His teacher reports that he speaks in school, both to her and to the other children. He also shouts recognisable sentences when playing in the playground. Much needs to be done to establish this freedom of speech, but the interesting part is that it is there, and has never been used. When looking at pictures the objects are identified with baby language—moo-cow, pussy-cat, etc.—but there is no sign of this "baby talk" in his spontaneous speech. On one occasion he pointed to the word "baby" and said "baba," so he is able to read (at least) that one word.

On one occasion he asked to be shown how to unlock a cupboard, but as with the lack of control in his lip movement, he could not grip the key with his fingers. He can now manage locks easily, and is insatiable in his desire for achievement. Again, if this boy had the facilities of the normal speech clinic available to him, much might be accomplished.

Miss H. Street:

Although any marked improvement in speech must inevitably take a very long time to achieve, it has been encouraging to see one or two of the children make satisfactory progress during the last year.

One little girl in particular has improved considerably. When she began to receive treatment her speech was very difficult to follow and she did not use any sounds which are articulated with the lips and front of the tongue. Her speech consisted entirely of vowels and those sounds which are made with the back of the tongue. However, she is now beginning to use many of the front sounds spontaneously and consequently this has clarified her speech.

With some of the children whose speech has not developed at all, it has been found beneficial to stimulate them with sounds allied to movement, and this has produced spontaneous babbling and vocalisation.

The interest of the parents and the help which they can give in home practice is very valuable, and where it exists makes it possible to gain more satisfying results.

Miss A. Johnson:

Work has continued steadily throughout the year, though no outstanding progress has been made.

Although it is evident that many children cannot benefit from speech therapy, there are a few who are improving slowly with regular attention.

Report of the Teacher of the Deaf

Mrs. J. Stevens reports:

Two kinds of tests have been used during the year—a simple screening test by voice, and a pure tone audiometric test.

None of the adults referred back after the preliminary screening tests for audiometry have been found to have significant hearing loss. Two of the junior children who failed on part of the screening test were found to have a slight conductive loss, and have been referred to the E.N.T. consultant for further investigation.

New admittances have been tested as a matter of course, but none have been found to have any hearing loss. Five new entries have still to be given a routine test.

The children have been most co-operative and have not been at all apprehensive of the strange electrical equipment they have been expected to wear and use.

Social Activities

Social activities have continued to occupy a prominent place in the Occupation Centre programme, and have claimed much time and effort on the part of the staff.

March 25th was Open Day and the children took part in an Easter play. May Day celebrations took place on the 1st May and the Sunday School children of All Saints Church, Hengrove, gave their Lent savings of £3 so that sweets could be bought for the children taking part. The Marlborough House Parent-Teacher Association donated a further £3.

The Annual Sports Day was held on the 17th June on the Purdown Hospital sports ground by kind permission of the Stoke Park Hospital Management Committee. On the 10th June an outing to Sand Bay was arranged by the Parent-Teacher Association and supported by the Bristol and District Society for Mentally Handicapped Children, for all those children unable to attend camp which commenced on June 26th.

A Harvest Festival Service was held at St. James Church, Horsefair, in October

On the 3rd November members of the staff accompanied patients to a fire-work display at the Bristol Rovers' football ground, organised by "Uncle Bob"

of the *Bristol Evening Post*. At Christmas the activities included, as usual, a nativity play and carol service and a pantomime acted by the children and Christmas parties for the children and older patients.

Camp

As in 1958, the Marlborough House annual camp was held at the Bristol Children's Help Society camp at Winscombe. A most enjoyable fortnight's holiday was provided for 51 boys and 48 girls.

Scouting and Guiding

The 72nd Bristol (Marlborough House) Scouts and Cubs under the leadership of Mr. W. J. Sparrow, Group Scout Master, have made good progress during the year. Enthusiasm for scouting has increased, particularly amongst the older boys, and there is now a waiting list of applicants for entry. In order to overcome these difficulties the seniors have been divided into an A and B troop, and an additional cub pack formed to allow expansion within the Group. Although the activities of the troop are confined to the precincts of Marlborough House, the lads have all shown a keen interest in their weekly meetings. It is intended, in the coming year, for the Scouts to have their own fortnight's camp, which will greatly enhance the activities of the troop.

The Guides and Rangers of the 68th Bristol (Marlborough House) Company have had a most successful year and taken part in many activities both at the Occupation Centre and in the area. The complement now stands at 15 Guides and 22 Rangers. A point of interest is the true spirit of Guiding which exists between the Guides in the district and those at Marlborough House. Every effort is made to make the mentally handicapped Guide feel that in Guiding she shares the same facilities as those enjoyed by her more fortunate sisters.

Sheltered Workshops

Persistent efforts have been made throughout the year to extend the scope of the sheltered workshops. Unfortunately, this has not been possible and, in fact, barely sufficient suitable contractual work has been found to keep the 45 men and 64 girls who are engaged in the project occupied. Pocket money payments have been maintained, but the income from the scheme has not permitted an increase in the rates paid.

The difficulty in finding tasks within the ability of the patients was intensified by a trade recession as recorded in the Annual Report for 1958. This problem has now been further increased by the fact that many hospitals and training organisations in the area are pursuing sheltered workshop schemes and seeking contracts of a similar nature.

It has, however, now been clearly established that workshops on these lines are serving a very valuable purpose, and are the best possible method of training the higher grade boys and girls who are now attending Marlborough House in increasing numbers.

It is hoped that during the coming year it may be possible to establish a separate workshop in which the most capable boys and girls can work together and that they may be able to produce sufficient work to warrant the payment to them of a small wage.

Reading Group

As mentioned above, there are an increasing number of young men and women now attending Marlborough House with comparatively high intelligence quotients. These patients have a limited reading and writing ability, but in

most cases this is insufficient for their needs in employment. As part of the training scheme for improving their social competence, reading and writing groups have been set up, and are held at regular weekly intervals.

Marlborough House Parent-Teacher Association

The Marlborough House Parent-Teacher Association has increased in membership during the year. It has conducted an energetic programme of social and instructional meetings.

The Association has again assisted in the provision of a coach outing to Sand Bay for the patients who attend Marlborough House but were unable to go to the Occupation Centre annual camp. Grants from the Parent-Teacher Association were also made during the year in respect of prizes for the Annual Sports Day, presents on the occasion of May Day celebrations, and at Christmas, for all boys and girls attending Marlborough House. At the beginning of the year, new 16 mm. cine projection equipment, at a cost of approximately £246, was presented to the Bristol Corporation Health Committee for the benefit of the mentally handicapped children and adults attending Marlborough House.

The Parent-Teacher Association has developed a quarterly News Letter which is sent out to all parents of children attending Marlborough House. This not only informs parents of all the events which have taken place, but contains an informative article on the subject of mental handicap. This has proved to be valuable health education material.

Bristol and District Society for Mentally Handicapped Children

This organisation has a big membership in Bristol and has given valuable support to the activities of the Occupation and Industrial Centres. Material aid has been provided in the form of a grant of £25 towards the cost of the outing to Sand Bay enjoyed by some of the patients attending Marlborough House, and also by the provision of a Parents' Trophy in the form of a cup and miniatures for presentation as House Awards at the Marlborough House Annual Sports Day. The Society has also presented a light car trailer to the industrial centre for use in association with the sheltered workshops.

Our grateful thanks and appreciation are extended to both the Parent-Teacher Association and the Bristol and District Society for Mentally Handicapped Children, for their help during the year.

The "Marlborough House" Film

The colour-sound film documentary "Marlborough House," which depicts the activities at a training centre for mentally handicapped children and adults, and which was sponsored by the Marlborough House Parent-Teacher Association and produced by the Bristol Cine Society, has now been in circulation for one year.

In the field of competition it has swept all before it. It has been awarded a silver trophy as one of the ten best amateur films of 1958 in a contest organised by the *Amateur Cine World* magazine. It has also received the British Film Institute cup and the Scottish Educational Film Association (Glasgow branch) prize as the best documentary film at the twenty-first Scottish Amateur Film Festival. Recently it has been entered in a competition organised by the British Medical Association, and it has been placed among the finalists and will be seen again by the panel of judges.

Much praise has been lavished on the film by critics from a most varied field of professions. Much has been written in film periodicals on the technical excellence of the film and the way in which the subject has been treated, but the

most pleasing result has been the way in which the film has been appreciated by the many hundreds of ordinary citizens who have seen it.

Requests for the film have been received and complied with, from all parts of the British Isles. It has been taken all over the United States of America by an officer of the Board of Control who was lecturing on mental health, and American audiences were most enthusiastic. A copy of the film has been requested by the Canadian Film Board.

The film has been shown on a number of occasions by the Bristol Cine Society and by the local authority Health Education Officer. Apart from this it has been taken out from Marlborough House by the Mental Health Officer and Deputy Mental Health Officer day after day and evening after evening, on request from all types of local societies. It would be difficult to find an age group, a type of person, or a professional body, who have not seen it. To name but a few it has been presented to old age pensioners' clubs, youth clubs and schools, to magistrates, police, doctors, nurses, chemists, teachers, Co-operative Guilds, Townswomen's Guilds, Women's Institutes, Young Wives' groups and student groups of all kinds.

Some audiences have started with an interest in mental health matters, others have asked for the film to fill in a gap in a programme. Without exception people have been left with a deeper understanding of the problems associated with mental disorder, an awakened interest in the subject, and an appreciation of the value of the work which is being done in the fields of social work and training.

It is customary to introduce the film by a talk on the whole aspect of mental health community work. It is felt that much valuable health education is thus effected, breaking down old and harmful misunderstandings and prejudices, and that this is of inestimable value to all mentally disordered persons and to the staff working to help them.

After-Care

After-care under Section 28 of the *National Health Service Act, 1948*, has continued to be provided, the number of persons on the register at the end of the year being as follows:

			Male	Female	Total
<i>Mental Deficiency Acts:</i>					
Discharged from Order	..	..	50	75	125
<i>Lunacy and Mental Treatment Act:</i>					
Psychiatric After-Care	..	..	38	23	61

Mental Deficiency Assessment Clinics

Full use has continued to be made of the Mental Deficiency Assessment Clinics held each second and fourth Tuesday in the month at the Central Health Clinic and fortnightly at the Bristol Children's Hospital. Cases have been submitted not only by the Bristol Local Health Authority but also by neighbouring local authorities.

During the year the following cases were dealt with:

					Central Health Clinic	Children's Hospital
New cases	..	..	..	..	49	10
Follow-up	..	..	..	..	52	52

This service is proving of considerable value in dealing with the many problems associated with mental deficiency.

Supervision of Mental Defectives

In operating the provisions of the *Mental Deficiency Acts*, 1913-38, one of the most important duties carried out by the officers of the mental health section of the Local Health Authority has been the supervision of mental defectives living in the community. This supervision has, in the past, been divided into five main groups, viz., statutory, friendly, after-care, guardianship and licence.

With the appointment of hospital social workers, licence cases have ceased to come under the care of the Local Authority, but, as a result of the policy to discharge patients from order after only a short period of licence, there has been a considerable increase in the number of cases referred for after-care. In Bristol, at the end of 1959, 50 men and 75 women were receiving this form of support. In recent years there has been a substantial reduction in the number of guardianship cases, and only 7 male and 3 female patients were the subjects of guardianship orders on December 31, 1959. This reduction has been due to the taking over of financial responsibility for maintenance payments by the National Assistance Board. The number of patients on the statutory and friendly supervision registers has, however, increased, and at the close of the year stood at 505 male and 407 female respectively. Admission to the supervision register has been the subject of only one condition, namely that the person could be established to have been mentally defective prior to the age of eighteen years. There has been no age limit, and it has been possible to assist patients throughout their lives. Neither has there been any need to establish a particular degree of mental retardation. Broadly the criterion has been that the person has been found to be incapable of adapting himself to the normal environment so as to maintain existence independently of supervision or external support.

There can be little doubt that the planners responsible for the 1913 *Mental Deficiency Act* envisaged supervision as being a means of providing the mental defective with protection. In the present enlightened age, there is rarely need for official help to shield the patient from cruelty, neglect, victimisation, or unscrupulousness. Although incidents of this type do occur, the service has developed along much broader lines, and has reached a stage where the mental welfare officer is accepted as a friend of the family and is willing to extend his help and social working ability to all members of the household, particularly where the problems of the relatives are resultant upon the presence of a mental defective in the home.

It has been the duty of the Local Health Authority to ascertain mental defectives living in the community. Below the age of two years this task has been the sole responsibility of the Health Department, but except in cases of severe social difficulty demanding some immediate action, the act of ascertainment, labelling an infant as mentally defective, has been deferred until a later stage in development. In 1959 only two infants were ascertained as mentally defective.

Between two and sixteen years of age children have been within the scope of the *Education Act, 1944*. The Local Education Authority has had the duty of providing the type of schooling best suited to the needs of educable children, and of excluding from the school system and referring to the mental health authority any children deemed to be incapable of benefiting from education because of a disability of mind. During 1959, 29 children have been referred in this way. The Second Schedule of the *Mental Health Act, 1959*, directs that this provision shall be continued, and will grant to parents or guardians rights of appeal additional to those now permitted.

During 1959, two children (one boy and one girl) were referred back to the education authority under Section 8 of the *Education Act, 1948*.

A further large group of children has been referred to the mental health section on leaving special schools or special classes in ordinary schools if their degree of mental retardation suggested a need for supervision. Section 57 (5) of the *Education Act, 1944*, has directed that these referrals must be made before the child ceases to be of compulsory school age. In Bristol the circumstances of such children have been carefully assessed at school leavers' conferences attended by medical officers, educational psychologists, head teachers, and officers of the Education Department and mental health section, the Children's Department and the Youth Employment Service. It is interesting to note that although this provision is deleted from the *Education Act, 1944*, by the *Mental Health Act, 1959*, the matter was discussed at length in Standing Committee E of the House of Commons in February 1959, and the Minister of Health expressed the view that boys and girls in this category would still need to be supplied with help from the officers of the Local Authority mental health service, but that referrals would in future be informal so that the implied stigma of a formal report could be avoided.

The remainder of the patients placed under supervision in the past have been ascertained when over the age of sixteen years as a result of reports from psychiatrists and general practitioners, magistrates courts, police and probation officers, the National Assistance Board, and many other statutory and voluntary organisations. It is not yet clear what provision can be made for helping this group of patients after the introduction of the new mental health legislation, particularly if the persons concerned are of only slightly subnormal intelligence.

The mental welfare officer is expected to be competent to advise parents on the upbringing and training of their mentally defective children, to assist with the provision of suitable employment for the adolescent, to guide adult mental defectives through the many problems which they encounter, and to intercede on behalf of patients in courts and other places when they find themselves in trouble because of their lack of understanding and their inability to manage their affairs. The mental welfare officer must also be fully conversant with the many services provided by other authorities, and be able to refer problems to the person or organisation best able to help.

It is difficult to decide at which stage in a patient's life supervision is most important—each brings its own particular problems. Many parents would undoubtedly express the view that they found the visits of the mental welfare officer of most value at the time when their children were first declared mentally defective and were excluded from school. At such a time many parents are extremely distressed, they resent and are unable to accept, the decision of the Education Authority, and having no knowledge of the facilities available for their handicapped child, are bitter in the belief that the child has been "discarded as useless material." At such times the visiting officer can, by tactful and sympathetic discussion, do much to alleviate the parents' anxiety and encourage them to accept the child's limitations, so that the task of helping the child to develop can be simplified.

The marriage of mental defectives, whether it be to another defective or to a person of normal intelligence, is invariably discouraged, but there is no legal barrier to such a union. If advice not to marry is not accepted there arises the difficult problem as to whether supervision should be continued. In many instances the defective proves to be incapable of managing the additional responsibility of a home and family, so that support from the mental welfare officer is needed. On occasions, however, to continue supervision would result in marital disharmony or would impose a stigma on the children. Very careful consideration is always given to all the circumstances in these cases before a decision is reached.

The *Mental Health Act, 1959*, does not specifically make provision for supervision of mental defectives as did the *Mental Deficiency Act, 1913*. It is quite clear, however, that there is no intention to deprive patients of the support which they have hitherto received. The necessity for some form of supervision has become more and more apparent with the increasing complications of everyday life, and the mental welfare officer will be expected to continue to place his considerable experience at the disposal of the mentally retarded persons living in the community.

The following case histories illustrate the value of supervision:

1. *Male—born 1937. I.Q. 64.*

Attended a residential special school for educationally subnormal children until June 1953.

His early life was spent in poverty and squalor in a squatters' camp. Both parents were unstable and irresponsible and their attitude hindered the boy's adjustment to employment.

When he was nineteen years of age the family was evicted from the camp and went to live in Hartlepool, Co. Durham.

Eighteen months later the patient returned to Bristol and contact with him was re-established. During the interval he had married and his wife had become pregnant. He had obtained a motor car by hire purchase agreement and had committed motoring offences for which he had been fined £30—he was unemployed and could not pay this amount. He had found unsuitable accommodation in a small bed-sitting-room with primitive sanitation. Before constructive help could be given he again went to live with his parents in Hartlepool.

Some months later, it was found that he was back in Bristol. He had a six-month-old infant and his wife was in poor health. He had become heavily involved with hire purchase commitments in respect of furniture, household goods, clothing, etc. A further £10 fine had been imposed upon him in respect of another motoring offence.

He has now settled in Bristol and it has been possible to give him close support over a period of several years. He disposed of his car and surrendered his driving licence. His financial problems have been straightened out and he has been assisted to obtain a council house. He has been helped to retain regular employment, and encouraged to undertake his responsibilities to his family and society. He now looks upon the mental welfare officer as a friend in whom he can confide his problems, and is a reasonably stable member of the community.

2. *Male—born 1942. I.Q. 67.*

This boy was referred to the mental health section in December 1958, when he left a special school.

The parents had been separated but had reunited. The father, in particular, was a most unstable person and the home environment was unsatisfactory. The boy was immature and asthmatical. He suffered from a severe speech defect and was very withdrawn.

Immediately after leaving school he ran into employment difficulties. He associated with gangs of undesirable companions and his activities led to enquiries by the police. In the home he became increasingly difficult, and actually attacked his father. At this stage the parents resented supervision by the mental welfare officer and would not agree to a suggestion that the boy should be placed in hospital for a period of training and discipline.

Eventually the confidence of the parents was obtained, and their resentment was tactfully broken down. They permitted attendance at the Marlborough

House Industrial Centre for daily training. The lad quickly settled down in the Centre, and became an industrious worker. He was later successfully placed in employment which he has retained. There has been a very considerable improvement in behaviour at home and in the parents' attitude towards him. Both parents are now grateful for the help which has been given, and they co-operate fully with the supervision afforded by the mental welfare officer.

Mental Illness

On the 1st October, 1959, Circular 27/59 was issued by the Minister of Health. This permitted the admission of patients to mental hospitals, registered hospitals, licensed houses, and other hospitals as from the 6th October, 1959, without using the procedures laid down in the Lunacy and Mental Treatment Acts. From that date any patient who was not unwilling to be admitted, and could suitably be treated without powers of detention, could be admitted informally in the same way as patients were admitted to general hospitals. Until further provisions of the Act relating to the new arrangements for the detention of patients in hospital are brought into operation, the existing arrangements for the admission of voluntary, temporary, and certified patients under the Lunacy and Mental Treatment Acts will continue alongside the informal arrangements.

The total number of known Bristol patients admitted informally to mental hospitals up to the end of 1959 was 86. In addition, 568 Bristol cases in Bristol hospitals were regraded from certified or voluntary to informal status.

During 1959, 656 cases were referred to the mental welfare officers, and this shows little change from previous years. Most of these cases necessitate a number of visits and impose upon the officers a great deal of personal responsibility.

Recent developments with a view to integration with the hospital social workers, and the much closer liaison established with the consultant psychiatrists, have resulted in mental welfare officers attending all psychiatric out-patient clinics and acting as social workers in them. Officers are also called upon to attend area case committees and hospital case conferences. Attendance at these committees and conferences is deemed to be of the utmost importance.

The introduction of the *Mental Health Act* will provide a welcome opportunity of permitting the mental welfare officer to fulfil a much more useful role in the future, that of a comprehensive mental health social worker. It is anticipated that with the co-operation of the consultant psychiatrists and hospital staffs it will be possible for him to maintain a close and helpful contact with the patient throughout all phases of mental illness. He will thus be able to follow the patient from his earliest referral throughout his illness and until ultimate recovery and rehabilitation. He will also be responsible for providing social case histories for general practitioners and consultant psychiatrists. In this work he will have full access to hospitals and out-patient departments.

The amount of social work which will have to be carried out when the *Mental Health Act* becomes operative is expected to be considerably in excess of that now performed, and it is considered that the time has now come to establish six mental health districts instead of the existing five, and to create a fully comprehensive mental health service within each area.

Difficulty has been experienced in obtaining beds for the purpose of observation in Manor Park Hospital and on several occasions the assistance of the consultant psychiatrists of the Bristol Mental Hospital has had to be enlisted to obtain accommodation in the mental hospitals as a matter of urgency.

Social Therapy Clubs

Diversional and Social Therapy Club

The Diversional and Social Therapy Club which was established in the Southmead Clinic in September, 1953, is now attended by 24 patients. As a result of close liaison between the officers of the Local Health Authority and the Regional Hospital Board, more patients are being referred to the club by the psychiatrists and hospital social workers. A consultant psychiatrist from Barrow Hospital is now providing psychiatric guidance and conducting discussion groups in the club.

Every effort is being made to increase the facilities provided by the club and it is felt that an essential part of this will be the introduction of evening sessions of a social nature.

There are many persons in Bristol who would benefit considerably by attendance at such clubs and who are anxious to avail themselves of the facilities. Unfortunately, it is not usually possible for them to travel from areas in the southern part of the City to Southmead each afternoon. It is therefore intended that club facilities shall be extended to other parts of the City.

Club for Mental Defectives

A club for mental defectives received the approval of the Mental Deficiency Acts Committee in November, 1939. The club continued in operation until the occupation centre at Kingsdown Parade was destroyed by enemy action in 1942.

There are an increasing number of high-grade boys and girls attending the Occupation Centre, and although some of these attend organised youth clubs in the City, they do not fit very well into these organisations, and there are a number who are unable or unwilling to join youth clubs attended by normal young people. There is a great need for some suitable evening activity for these patients and it is intended that a social club will be set up at Marlborough House for all mentally handicapped young persons in the community.

It is proposed that in the first instance the club shall be open on three nights per week, one night for boys, one for girls, and a mixed night.

Report of the Health Visitor for Mental Health After-Care

"Institutional Neurosis" is the title of a recent publication by Dr. Russell Barton in which he describes a mental hospital disease which affects the long-term patient. Dr. Barton points out that after four years the patient is likely to be suffering from two diseases, and while the original disease may clear up, the other will persist and show among its symptoms apathy, resignation, and a loss of initiative which amounts to a complete adjustment to the authoritarian atmosphere of the institution and a resultant loss of contact with the outside world. The Day Centre at Barrow Hospital was established in 1958 as part of a programme for the rehabilitation of these chronic psychotic patients, who fall into three main categories:

1. Chronic hospital patients for rehabilitation.
2. Chronic remitted patients in need of sheltered employment.
3. Former patients who have left hospital but have never returned to normal conditions.

The Day Centre is a compact unit in the hospital grounds accommodating 50 patients of both sexes; this mixing of the sexes is in itself an important factor in the rehabilitation of long stay patients coming from segregated wards. The working week is approximately 25 hours; the work is supplied by contracts from outside firms who pay the same rates as they do to their own piece-workers.

Ten per cent is deducted by the hospital authority, the rest distributed amongst the patients, payment being proportionate to work done, as this helps to give the patients an incentive to work more efficiently. The atmosphere is as much like a proper workshop as possible so that the patients' reaction to normal industrial discipline may be observed. Case conferences are held at regular intervals between the doctor in charge of the unit, the nursing staff, and the social worker, and, at a later stage, with the Disablement Resettlement Officer when plans for the individual's rehabilitation are worked out in detail. Assessment of progress is assured by the system of case assignment, there being a staff patient ration of 1 : 10.

The first stage of the Day Centre programme is intended to provide the patient with the opportunity of experiencing working conditions while still living in the hospital. He has to deal with all the associated problems of making new relationships with other workers and staff both at the work bench and during leisure periods. Efforts are made to provide the patient with the opportunity of resuming responsibility for his own affairs, by encouraging the setting up of patients' committees, where problems of work are discussed and social activities planned, the staff playing a decreasingly authoritarian part.

The second stage of rehabilitation is reached when the patient is thought to be ready to try living in the community and travelling daily by hospital transport to work. The goal is achieved when he is helped to make the final break from the Day Centre, taking his place as a full-time member of the community.

The Social Worker's function in this scheme is to act as a liaison between the individual patient and the community, helping with the many problems, both practical and intangible, which have to be overcome before he can succeed in completing his return to a normal life. She explores the home environment and encourages positive family contributions by visiting relatives and obtaining their advance co-operation in the plan for rehabilitation. This often presents considerable difficulty as the family may have closed its ranks and be unwilling to have the patient back after such long absence. On the other hand, the patient may be completely isolated and have no home or family, so that accommodation will have to be sought for him. This is a problem of some magnitude in view of the scarcity of suitable hostels. Another aspect of the Social Worker's function is to deal with the patient's dependence on the social amenities in the community. An outstanding need is for the provision of more social clubs to deal with this problem, with emphasis on evening activities.

The most important single item in the rehabilitation programme is that of finding suitable work at the right time. It is of enormous therapeutic value and unless the gap between the attaining of the standard of work for industry and finding a job is bridged, the patient may relapse. It must be remembered that a large proportion of chronic cases were formerly unskilled workers or have in some cases (as in schizophrenia) been ill since adolescence, and thus have very little to offer in the competitive field of industry. It therefore falls to the social worker to spend a considerable amount of time and effort in making personal contact with employers and their personnel officers, enlisting their sympathetic interest and practical help. Close contact with the Ministry of Labour is maintained and suitable patients recommended for attendance at the Industrial Rehabilitation Units and vocational training centres.

Considerable practical help is given in dealing with patients' economic problems, most having very limited means and needing immediate help from community resources, so that a close liaison is maintained with the National Assistance Board and the Ministry of National Insurance. The Social Worker

also calls upon the services of many other agencies both statutory and voluntary and acts as a link with all the local authority services.

An interesting aspect of the social worker's function in the Day Centre is to help in training nursing staff, who are increasingly concerned with social problems. They are given the opportunity of observing the home situation of their patients by accompanying the social worker when she visits the family.

In practice there are many variations in this progressive programme for rehabilitation, as the material is human nature which will always be unpredictable. This is more than ever true of our particular cross section of mentally sick people who face the most difficult task of rehabilitation with the poorest natural equipment. Failure at any stage is not unexpected, so that the organisation must be sufficiently resilient to absorb the shock of temporary breakdown and make a fresh start possible. A small but steady stream of patients has completed this programme and are now successfully established as independent members of the community.

Suicides

During 1959, 41 suicides were reported to the Coroner, and 32 attempted suicides to the police. These figures relate only to Bristol residents who committed or attempted suicide in Bristol.

The following table is an analysis of the 1959 cases:

	<i>Suicide</i>		<i>Attempted Suicide</i>		<i>Total</i>		<i>Male and Female</i>
	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>	
Poisoning:—							
Coal Gas	9	14	3	7	12	21	33
Aspirin	—	1	1	1	1	2	3
Narcotic	1	2	—	—	1	2	3
Unspecified "tablets"	—	—	2	4	2	4	6
Drowning	3	1	1	1	4	2	6
Cutting throat	—	—	1	—	1	—	1
Cutting wrists	—	—	2	1	2	1	3
Hanging	3	—	—	—	3	—	3
Jumping from window	—	—	—	3	—	3	3
Jumping from bridge ..	—	—	—	1	—	1	1
Jumping from rocks ..	4	2	—	—	4	2	6
Jumping under vehicle	—	—	—	2	—	2	2
Jumping under train ..	—	—	—	1	—	1	1
Burning	—	1	—	—	—	1	1
Stabbing	—	—	1	—	1	—	1
	20	21	11	21	31	42	73

The age incidence was as follows:

<i>Age Group</i>	<i>Suicide</i>		<i>Attempted Suicide</i>	
	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>
Under 20	—	—	1	1
20-29	2	—	1	1
30-39	2	2	2	3
40-49	—	5	2	4
50-59	10	6	2	6
60-69	4	5	2	3
70-79	1	3	1	2
80+	1	—	—	1
	20	21	11	21

Anticipatory Guidance Service

Dr. Lumsden Walker, Consultant Psychiatrist, reports:

During 1959, the Anticipatory Guidance Service set up under the Bristol Health Committee, with as its primary objective the treatment of pre-school children suffering from early symptoms of emotional disturbance, has, of necessity, merged with the Child Guidance Clinic of the Education Committee; this latter service having come under the aegis of the Health Committee.

The latter half of the year has been very concerned therefore with the complex administrative measures required to produce an amalgamated service for the Bristol City area. It was felt that the work of the Anticipatory Guidance Service with the parents, as well as with the young children, should continue to be emphasised and that is why we chose as the name of the new service—Child and Family Guidance Service.

This places emphasis upon our view that the emotional disturbance of the young child is in very many cases the consequence of emotional disturbance within the family and very frequently in one or other parent, or between the parents.

The Anticipatory Guidance Service during its time of operation concerned itself with setting up consultative clinics to help families in the main housing estates of the City, as will be seen from Dr. Barbour's report (see annual report of Principal School Medical Officer), in the merging of the two services, we have attempted to make as a definite and long-term project the setting up of peripheral family and child guidance services, endeavouring as far as our staff will allow to cover most of the estates of the City.

The staff during the year has consisted, as far as this service is concerned, of three psychiatric social workers—Miss Stubbs as senior, Miss Laver, and Miss Birkett. During the first part of the year, Mrs. Gatliff from the Child Guidance Clinic has also assisted for one or two sessions a week. Dr. Coulsting has continued as psychiatrist to this Service. The parents have been helped in the clinics by the psychiatric social worker in their particular area. The case conferences with health visitors which have been regularly held in most areas have proved extremely successful, but on long-term view, the ideal would be for all those concerned in a case, particularly the general practitioner, and the school teacher, to be able to attend case conferences when their particular patient or pupil is being discussed.

I would like to emphasise the final two paragraphs of Dr. Barbour's report, namely that the necessary administrative re-arrangements have put a strain on a rather limited staff and that in addition to this, during the latter months of the year, the numbers being referred to our clinics showed a slow but steady rise and as we remain two psychiatric social workers short on our establishment, it is probable that in the early future either the waiting list will build up to an increasing extent or the present staffing will prove to be inadequate.

Statistical Tables

(i) Total Mental Defectives known to Local Health Authority at 31st December, 1959

(a) <i>Under Mental Deficiency Acts:</i>					<i>Male</i>	<i>Female</i>	<i>Total</i>
In Mental Deficiency Hospitals (including licence)					375	328	703
Under Guardianship					7	3	10
Under Supervision					504	404	908
Totals					886	735	1621
(b) <i>Not under Mental Deficiency Acts:</i>							
Pending ascertainment					21	14	35
Discharged from Order (after-care)					50	75	125
Totals					71	89	160
All known cases					957	824	1781

(ii) Cases Referred as Mentally Defective During 1959

(a) <i>Referred by:</i>					<i>Male</i>	<i>Female</i>	<i>Total</i>
Local Education Authority					46	40	86
General Medical Practitioners					1	—	1
Courts or Police					3	—	3
Others					13	11	24
Totals					63	51	114
(b) <i>Disposal:</i>							
Admitted to Mental Deficiency Hospitals (Under Order)					4	3	7
Admitted to Mental Deficiency Hospitals (Informally)					4	3	7
Placed under Supervision					29	28	57
Action not yet taken:							
School Leavers					15	9	24
Others					7	4	11
Action unnecessary:							
Left district					—	1	1
Continued at school for further period					3	—	3
“Friendly” supervision only					1	3	4
Totals					63	51	114

(iii) **Analysis of Mental Defectives in Hospital (including those on Licence)**

				<i>Male</i>	<i>Female</i>	<i>Total</i>
At 31st December, 1958	..	..	..	365	339	704
<i>Admissions during 1959:</i>						
From Supervision	..	..	..	14	11	25
From Guardianship	..	..	..	1	—	1
Others	..	..	..	9	10	19
Totals	..	..	..	24	21	45
<i>Methods of Admission:</i>						
Section 3 M.D. Act	..	..	..	3	4	7
Section 6	..	..	..	2	5	7
Section 7 (1) and (2) M.D. Act	..	..	..	1	—	1
Section 8 M.D. Act	..	..	..	5	—	5
Informal admissions	..	..	..	13	12	25
Totals	..	..	..	24	21	45
<i>Discharges during 1959:</i>						
By order of Board of Control	..	..	..	36	54	90
By operation of law	..	..	..	6	13	19
				42	67	109
Remaining informally	..	..	..	41	47	88
				1	20	21
Discharged from informal care	..	..	..	8	6	14
Died	..	..	..	5	6	11
				14	32	46
Remaining in Hospital at 31st December, 1959				375	328	703

(iv) **Analysis of Mental Defectives under Guardianship**

				<i>Male</i>	<i>Female</i>	<i>Total</i>
At 31st December, 1958	..	..	.	8	4	12
Discharged during 1959	..	..	..	1	1	2
Remaining under Guardianship at 31st December, 1959	..	..	..	7	3	10

(v) Analysis of Mental Defectives under Supervision

					<i>Male</i>	<i>Female</i>	<i>Total</i>
At 31st December, 1958	..	..	..	..	512	411	923
<i>Added during 1959:</i>	..	..	..	..	51	44	95
<i>Removed during 1959:</i>							
Discharged from Supervision	..	..	..	..	26	16	42
Admitted to Mental Deficiency Hospital	..	..	..	..	16	9	25
Left District	..	..	..	..	12	18	30
Died	..	..	..	..	5	8	13
Totals	..	..	..	..	59	51	110
Remaining at 31st December, 1959	..	..	..	..	504	404	908

(vi) Bristol Patients in Mental Hospitals at 31st December, 1959

					<i>Male</i>	<i>Female</i>	<i>Total</i>
Certified patients	..	..	..	..	193	125	318
Voluntary patients	..	..	..	..	289	197	486
Temporary patients	..	..	..	..	1	4	5
Totals	..	..	..	..	483	326	809
Under Informal care (including patients at Dundry Villas and Pritchard House)	..	..	..	..	249	448	697
Totals	..	..	..	..	732	774	1506

(vii) Persons Receiving Psychiatric After-Care from Local Health Authority at 31st December, 1959

					<i>Male</i>	<i>Female</i>	<i>Total</i>
Ex-Service	..	..	..	..	12	—	12
Ex-Mental Hospitals	..	..	..	..	20	16	36
Others	..	..	..	..	6	7	13
Totals	..	..	..	..	38	23	61

(viii) Mental Illness—Cases dealt with by Mental Welfare Officers during 1959

<i>A. Removed to Observation Ward under Section 20 of Lunacy Act 1890:—</i>	<i>Under 20</i>		<i>20-29</i>		<i>30-39</i>		<i>40-49</i>		<i>50-59</i>		<i>60-69</i>		<i>70-79</i>		<i>80 and over</i>		<i>Total</i>
	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	
Transferred to Bristol mental hospitals as certified patients	96
Transferred to other mental hospitals as certified patients	6
Transferred to Bristol mental hospitals as voluntary patients	101
Transferred to other mental hospitals as voluntary patients	3
Transferred to Bristol mental hospitals as temporary patients	7
Transferred to other mental hospitals as temporary patients	1
Transferred to Bristol mental hospitals as informal patients	3
Discharged home	61
Transferred to sick wards	34
Referred to Welfare Services Department	61
Referred back to Police	1
Died before further action taken	1
Total number of Section 20 cases	27
<i>B. NOT dealt with under Section 20 of the Lunacy Act, 1890:—</i>	368
Certified direct admissions to mental hospitals	8
Voluntary direct admissions to mental hospitals	45
Informal direct admissions to mental hospitals	1
Temporary direct admissions to hospitals	1
Urgency Orders (subsequently certified)	18
Provided with care other than under Lunacy and Mental Treatment Acts	215
Total number of cases not under Section 20	288
Total cases dealt with (<i>A.</i> and <i>B.</i>)	656
<i>Admissions to Mental Hospitals</i>																	
Certified	128
Voluntary	89
Temporary	9
Informally	4
Total	290

PREVENTION OF ILLNESS, CARE & AFTER CARE

TUBERCULOSIS

Dr. P. W. Bothwell

(Senior Medical Officer, Epidemiology)

The patterns of mortality and morbidity from tuberculosis in Bristol are similar to those for the country as a whole, though Bristol has a relatively favourable incidence compared with cities of similar size. Between 1950 and 1959 deaths fell from 201 to 34 and notifications from 558 to 281 per annum. The present statistical situation in Bristol is such that we may anticipate about 300 new cases to be notified annually and about 30 deaths to occur from tuberculosis. At 31st December, 1959, there were 30 patients with tuberculosis in hospital, 250 on National Assistance, and 4,164 on the tuberculosis register.

Positive sputum cases fell from 148 in 1950 to 78 in 1959 and the incidence of positive skin tests to tubercule in children at 13 years fell from 17.2 per cent. in 1954 (the first year of general testing) to 8.2 per cent. in 1959.

These figures for deaths and notifications are great reductions on the incidence ten years ago, but there is some evidence that the present figures will be more difficult to reduce. The present problem in tuberculosis is therefore how best to eradicate the remaining disease and more concentrated and localised effort is necessary to do this. New developments in chemotherapy, and case-finding by tuberculin testing and M.M.R. techniques, are closely concerned with this problem.

Two main approaches are possible:

- (1) The large-scale "blitz" campaign, on the lines of the Glasgow campaign, in which many M.M.R. units made a concentrated examination on the proportion of the population who responded (about 75 per cent.). The expected cost of this type of manoeuvre in Bristol would be at least £50,000.

An examination of the statistical trends in the disease and the consideration of its localisation, with a review of the currently experienced response to X-ray by the public, as discussed in the literature, suggest an alternative approach, namely:

- (2) The concentration of the mobile units on one section or ward at a time, combining tuberculin testing of school children and follow-up into families, with vaccination and M.M.R. by a new 100 mm. unit; together with a special attempt (in one ward at a time) to enlist the co-operation of managements and trade unions in getting X-rays of that fraction (30 per cent.) of the population which never avail themselves of M.M.R. From this "reluctant 30 per cent." much higher rates of T.B. may be expected. Attention should also be given to special groups at risk, persons in contact with the public and persons resistant to co-operation, e.g., hostel populations, from which 9 notifications came in 1959 (a rate of 4 to 6 per 1,000, as compared with 0.8 per 1,000 for general population). Another group at risk are the non-co-operators with the Chest Clinic, of whom there are now about 40 persons who have ceased to attend for surveillance; these may or may not be infectious.

Such selective screening, ward by ward is likely to be a more effective means of case-finding, and development of this method is to be anticipated.

The Care and After-Care of T.B. Patients and their Families

The Senior T.B. Welfare Officer is also Hon. Secretary of the Bristol Tuberculosis Voluntary Care Committee and this arrangement plays a quite important part in ensuring that the patient and his family receives all the help to which they are entitled, both from statutory and voluntary funds.

During 1959 application forms were issued to some 252 patients for allowances payable in certain cases of pulmonary tuberculosis by the National Assistance Board. Under the council scheme a daily grant of 2 pints of milk per day was granted to the average of 303 patients a day on medical recommendation and subject to an income limit.

Housing conditions in 80 families were such that support was given to an application for re-housing and 50 families were re-housed.

Other sources of help include the Ministry of Pensions and National Insurance for sickness benefit and disablement pensions, the Bristol District Nursing Association for home nursing, the Council's Home Help service for domestic help and the Children's Officer for boarding out children.

Despite all the help which is available from statutory funds, there is still a gap between income and expenses which must be bridged. The Tuberculosis Voluntary Care Committee during 1959 made 120 grants of clothing, footwear, holidays, removal expenses etc., and did in many more cases act as intermediary between the patient and the National Assistance Board.

Occupational therapy classes are still held under the Committee's auspices and the occupational therapist continues to visit the homes of bed bound patients. At an exhibition held by the Rotary Club, work completed by patients attending these classes attained the highest number of marks.

Most patients can return to normal employment after treatment. For those to whom this does not apply, arrangements are made that they should be registered with the Ministry of Labour under the *Disabled Persons (Employment Act)*. The Disablement Resettlement Officers of the Ministry then place them directly into suitable employment, or after a time at an Industrial Rehabilitation Unit, or possibly at a Government Training Centre. The Special Remploi Factory at Southmead provided sheltered employment under medical supervision for an average of 70 men and women during 1959.

The Voluntary Care Committee provided suitable employment for 11 ex-patients at kiosks for the sale of tobacco, cigarettes, stationery, confectionery, etc., in hospitals.

The foregoing briefly indicates the variety of activities undertaken by the Council in co-operation with the hospital services, the Tuberculosis Voluntary Care Committee, and other bodies, so as to ensure proper care of the tuberculous patient from the day of diagnosis.

This care and after-care work takes its place as a preventive measure alongside the others which are applied to members of his family and to the community at large. None of them should be relaxed, since all contribute to the effort to eradicate tuberculosis.

VENEREAL DISEASES

A. E. Tinkler, M.A., M.D., D.P.H.
(Consultant V.D. Officer)

During the past few years there has been a continued rise in the total number of new cases seen at the V.D. Clinics in Bristol.

Table 1 New Cases—All Conditions—Seen at the Bristol V.D. Clinics 1955–1959

				<i>All Cases</i>	<i>Bristol Residents</i>
1955	..	..	..	1,848	1,254
1956	..	..	..	1,802	1,269
1957	..	..	..	1,880	1,325
1958	..	..	..	2,027	1,502
1959	..	..	..	2,280	1,664

An analysis of these figures shows that syphilis (all stages) declined further to a record low level of 16 new cases (Bristol residents only) in 1959. Gonorrhoea showed a very disturbing increase in incidence while the number of new cases of "other conditions" increased slightly.

Syphilis

The only satisfactory feature in the venereal disease incidence in the Bristol area is the continued decline in the incidence of syphilis.

Table 2 Number of New Cases of Syphilis seen at the Bristol V.D. Clinics 1955–1959

		<i>All Cases</i>			<i>Bristol Residents Only</i>		
		<i>Early Syphilis</i>	<i>Late Syphilis</i>	<i>Total</i>	<i>Early Syphilis</i>	<i>Late Syphilis</i>	<i>Total</i>
1955	..	23	45	68	8	26	34
1956	..	27	55	82	13	34	47
1957	..	26	68	94	14	38	52
1958	..	19	25	44	9	19	28
1959	..	26	7	33	10	6	16

For the first year on record no cases of congenital syphilis were diagnosed in the Bristol clinics in 1959.

Gonorrhoea

In contrast to syphilis there has been a very disturbing increase in the incidence of gonorrhoea. The number of new cases seen in the Bristol V.D. Clinics in 1959 was more than twice that of the previous year.

Table 3 Incidence of Gonorrhoea 1955–1959

			<i>England and Wales</i>	<i>All Cases</i>	<i>Bristol Residents Only</i>
1955	..	..	17,681	281	158
1956	..	..	20,310	249	151
1957	..	..	24,352	257	152
1958	..	..	27,915	249	233
1959	..	..	31,320	604	433

It was suggested in the 1957 report that the pattern of immigration was probably an important factor in the increased incidence of gonorrhoea which

could then be observed in England and Wales as a whole. At that time the incidence in the Bristol area had not risen and it was suggested that the smaller proportion of immigrants in the Bristol population, as compared with other great ports and cities of the country, might explain this fact; but the serious rise in the incidence of gonorrhoea which occurred in 1959 among the male West Indian population of Bristol cannot be explained on a population basis alone.

Table 4 Gonorrhoea—Males only

<i>Percentage of West Indians—Bristol Clinics</i>						
<i>All Cases</i>				<i>Bristol Residents Only</i>		
	<i>Total Cases</i>	<i>West Indians</i>	<i>% West Indians</i>	<i>Total Cases</i>	<i>West Indians</i>	<i>% West Indians</i>
1958 ..	190	33	17%	143	33	23%
1959 ..	336	131	39%	280	131	47%

Thus, in 1959, of the male Bristol residents treated for gonorrhoea in the Bristol clinics 47 per cent of the cases occurred among the small West Indian population of the City. Unfortunately figures are not available to make a year by year comparison between the immigrant population and the incidence of venereal disease, but it seems most unlikely that the West Indian male population of Bristol rose in 1959 in the same proportion as did the incidence of gonorrhoea amongst them. Comparable figures for other areas of England and Wales are not available for 1959 but the British Co-operative Clinical Group recently completed a study of the country of origin of patients attending V.D. Clinics in England and Wales. The figures in Table 5 below are taken from the draft report of the study and give the percentage of male patients of West Indian origin treated for gonorrhoea in certain urban clinics of England and Wales in the year 1958.

***Table 5 Gonorrhoea in Males 1958**

<i>Percentage of West Indians in Certain Urban Clinics</i>						
<i>Clinic</i>				<i>Total Cases</i>	<i>West Indians</i>	<i>% West Indians</i>
Bristol .. .. .	..	..	..	190	33	17%
						(1959 = 47%)
Huddersfield .. ..	..	..	..	163	126	77.3
Stratford (London) ..	..	..	..	73	42	57.5
Birmingham .. ..	..	..	..	1,106	551	49.8
Ipswich .. .. .	..	..	..	75	36	48
Prince of Wales (N. London) ..	..	..	..	116	55	47.4
St. Mary's (London) ..	..	..	..	2,448	1,143	46.7
Leeds .. .. .	..	..	..	414	163	39.4
Manchester R.I. .. ..	..	..	..	325	115	35.4
Sheffield .. .. .	..	..	..	163	53	32.5
St. Thomas's (London) ..	..	..	..	445	120	27
Whitechapel Clinic (London) ..	..	..	..	1,448	386	26.7
Nottingham .. .. .	..	..	..	398	106	26.6
W. London .. .. .	..	..	..	682	139	20.4

These figures indicate that the incidence among the West Indian population of Bristol and other urban areas now presents a serious public health and social problem. It seems unlikely that this high incidence will decline until the sociological factors responsible for it have been recognised and dealt with.

* Acknowledgment is made to the British Co-operative Clinical Group for permission to quote the figures from their report.

The following report has been contributed by Miss Gwyneth Stinecombe, the Medico-Social Worker.

Although there was a sharp rise in the incidence of gonorrhoea during 1959, the importance of immediate contact tracing was fully realised, with the result that a record number of female contacts were persuaded to attend the Clinics by the Social Worker. The active co-operation of the patients, themselves, to bring in their own contacts, showed a welcome increase and was of great assistance in view of the increasing volume of work dealt with on the welfare side of the Clinics.

Each new patient receiving specific treatment is interviewed by the Social Worker and the success or otherwise of these initial interviews is without doubt reflected in the cordial relationship existing between patient and worker. The problems revealed in the privacy of a confidential interview are manifold and demonstrated unmistakably the urgent need of many patients for advice and help. Many are grateful for an opportunity to talk over deeply personal matters with an impersonal Social Worker.

The default control and rehabilitation aspects of the Clinics have been maintained with a marked degree of success and the V.D. Voluntary Care Committee again made it possible to distribute Christmas cheer to needy patients, and to financially assist necessitous cases during the year.

Lectures and talks were given to students and various professional and other bodies. These opportunities are invaluable in bringing a wider public to a fuller realisation of the social implications of venereal diseases.

The following figures indicate the statistical result of the year's work:—

	<i>Males</i>			<i>Females</i>		
	<i>Bristol</i>	<i>Other Areas</i>	<i>Total</i>	<i>Bristol</i>	<i>Other Areas</i>	<i>Total</i>
Total number of Registrations during 1958	1,386	157	1,543	535	51	586
New cases persuaded by Social Worker to attend	44	—	44	157	6	163
New cases admitted through other agencies	1,342	157	1,499	378	45	423
Number of cases dealt with by Social Worker during the year	494	62	556	618	29	647
New cases interviewed in clinics	434	50	484	462	27	489
Current cases interviewed in clinics	201	14	215	828	129	957
In-patients interviewed in wards	41	4	45	33	11	44
Contact tracing visits	88	1	89	330	7	337
Default visits	249	—	249	297	—	297
Blank visits (a) New cases	43	—	43	91	—	91
(b) Default	83	—	83	88	—	88
Visits for other purposes	<i>Male and Female</i>			412	15	427
Total visits, including those for other purposes	<i>Male and Female</i>			1,681	23	1,704
Consultations with voluntary bodies	<i>Male and Female</i>			—	—	377
Social Worker's attendances at clinics	<i>Male and Female</i>			—	—	436
Number of letters sent by social worker: (a) to new cases	5	—	5	24	—	24
(b) to defaulters	275	—	275	241	—	241
(c) others	35	—	35	36	—	36

Default Control — 1959

	<i>Males</i>	<i>Females</i>	
Number of 1959 patients defaulting (new registrations)	108	91	
Number of other patients defaulting .. .	27	97	
	<hr/> 135	<hr/> 188	
Number of actual defaults involved		185	267
Number of patients who returned for treatment	86	148	
Number of patients who did not return ..	<hr/> 49	<hr/> 40	
<i>Disposal of Balance</i>			
Transferred to other clinics outside Bristol area	9	2	
Refused to attend again	20	19	
No trace	16	10	
False Address	1	1	
Carried forward to 1960	3	8	
	<hr/> 49	<hr/> 40	

THE AMBULANCE SERVICE

The following report has been submitted by Mr. R. F. Wood, Chief Ambulance Officer:

Highlights of 1959

1. The reduction of the miles per patient figure to the lowest since 1952 when the Health Department assumed direct control of the day to day operation of the Ambulance Service.

2. A detailed survey of 999 calls.

3. The trial of sirens as a warning signal in place of bells.

The "miles per patient" figure in 1952 when operational control of the ambulance service was assumed by the Health Department stood at 6.57. Since that date every effort has been made to find ways and means of reducing this figure whilst ensuring that patients were conveyed with care and efficiency. The introduction of radio telecommunication, discussion between members of the Health and Hospital Management Committees and co-operation by those bodies, personal contact with doctors and constant liaison with hospital staffs and the goodwill of all members of the ambulance service has resulted in the figure being reduced to 4.98 in 1959.

This represents a saving of 1.59 miles per patient despite the fact that the number of patients carried has increased from 133,442 in 1952 to 150,623 in 1959 (i.e. an increase of 27,181).

Because of questions in Committee and reports which appeared in the local press concerning alleged delays in reaching accident cases in certain parts of the City, it was decided to carry out a detailed survey of all such cases in an endeavour to ascertain the facts and whether improvement could be effected. The details of this survey are set out as an appendix to this report and although a plot is shown for the month of August, 1959, case papers for other months were examined and the overall picture found to be almost identical in pattern with that of August. The survey indicated that 65.5 per cent. of the accident emergency calls related to places within a two-mile radius of the site of the proposed central ambulance station. Further that 68.8 per cent of the calls were from places north of the River Avon and 31.2 per cent. on the south side. The total number of emergencies plotted was 592 of which 562 occurred within the City boundary. The remainder occurred in the area in which the service acts as agents of the Somerset County Council, or arose under the mutual assistance arrangements operated in the Gloucester County Council.

An analysis of the figures showed that the average time taken to reach an accident case was 8.7 minutes and, that with an average of four miles running distance to the scene of the accident, the returns of the accident involved in 70 per cent. of the calls were receiving attention within ten minutes from the time of receipt of the call. When considering the time taken to reach the scene of an accident it must be borne in mind that in some cases a distance of eight miles or more has to be covered by the ambulance before reaching the scene of the accident.

As a result of the survey it was decided that when circumstances permitted ambulance crews should stand by, with their vehicles at two additional points in the City. By this means it was hoped that it might be possible for the time taken to reach an accident to be still further reduced in certain areas of the City.

Traffic congestion is always a vital factor to be taken into account when considering speedy arrival at the scene of an accident and a trial has been made of the value of sirens for securing priority passage. Two sirens were fitted to

vehicles of the Ambulance Service and used for a period. During this trial it was proved beyond doubt that such a warning system enabled all motorists, pedestrians and police on point duty to have audible warning well in advance of the ambulance. *The result was a saving in time on many journeys of as much as five minutes.* Unfortunately it has now become apparent that present legislation precludes the use of sirens by ambulances, so representation has been made through the appropriate channels to obtain an amendment in the law.

General

The existing arrangements between the Ambulance Service, the Hospital Car Service (W.V.S.) and the Taxi Association for the conveyance of sitting patients has continued to work well, all requests being met and dealt with promptly and efficiently.

Full use was made of the Avonmouth Docks Ambulance, and the British Railways energetic and kindly efforts on behalf of the Ambulance Service enabled an increased number of patients to be sent by rail. In this respect thanks and appreciation are due not only to the Railway staff who arranged such journeys, often at very short notice, but also to the escorts (male and female) who accompanied the patients and whose efforts ensured that the patients were well cared for throughout the whole journey. It should be mentioned that one female escort alone put in over 1,000 hours voluntary duty in escorting patients on behalf of the Ambulance Service—truly a remarkable achievement.

Vehicles

Four vehicles were replaced during the year by two sitting case vehicles of the Morris Minibus type with provision for stretcher equipment in an emergency, and two ambulances on Morris LD Chassis. On one of the ambulance chassis it was decided to incorporate the Pneuride Air Suspension unit on an experimental basis. Thanks are due to Mr. H. M. Ellis, Transport and Cleansing Officer, for his interest in this direction and his efforts on behalf of the service throughout the year in connection with the maintenance and care of vehicles.

Training

It is not an easy task to arrange training sessions for ambulance personnel who by nature of the service have to perform varied shift duties, and to ensure that everyone receives the requisite amount and the right type of training.

It was possible, however, in the early part of the year to conduct a course of refresher training in Civil Defence on two successive mornings each week for six weeks. Arrangements will be made in the future for further lectures on other aspects of the work likely to be encountered in the day to day operation of the service.

The year has been worthwhile in that there has been ample evidence to show that with the team spirit which exists in the Service, and the help and understanding of all those who really appreciate what is involved in running a modern ambulance service, much can be accomplished, but there is much still to be done. Effective action is limited however by certain factors, not the least of which is the long hoped for provision of a central station. When this—or at least the first phase of it—has been accomplished, it will be possible to weld the service into a more efficient striking force in time of peace, or, if needed, in time of war.

It may seem odd to end a report on a mention of something which all right-thinking people hope will never happen again as far as this country is concerned.

The threat, however, is still with us and the Ambulance Service has to be prepared to meet it. In so doing, it must of necessity be the foundation stone on which an expanded service will be built. All personnel of the Ambulance Service are therefore faced in the future with a dual task which will call for considerable application of effort and devotion to duty.

Bristol Ambulance Service Statistics for Year ending Dec. 31st 1959

<i>Type of Case</i>	<i>Bristol Ambulance Service</i>					<i>Supplementary Services</i>		<i>Grand Total</i>
	<i>Accidents</i>	<i>Maternity</i>	<i>Inf/D.</i>	<i>General</i>	<i>Total</i>	<i>Taxis</i>	<i>H.C.S.</i>	
January	545	255	86	12,119	13,005	31	79	13,115
February	541	211	89	11,089	11,930	38	35	12,003
March	465	219	51	11,551	12,286	42	51	12,379
April	552	238	59	11,730	12,579	34	57	12,670
May	668	225	70	11,360	12,323	37	80	12,440
June	590	208	77	11,954	12,829	43	130	13,002
July	574	200	81	11,879	12,734	34	80	12,848
August	585	186	74	10,209	11,054	17	47	11,118
September	621	186	59	11,324	12,190	29	137	12,356
October	605	233	56	12,352	13,246	32	142	13,420
November	587	182	52	11,988	12,809	43	115	12,967
December	606	195	40	11,342	12,183	30	92	12,305
<i>Total</i>	6,939	2,538	794	138,897	149,168	410	1,045	150,623
<i>Total for year 1958</i>	6,500	3,069	1,094	138,221	148,884	592	1,100	150,576

<i>Bristol Ambulance Service</i>					<i>Supplementary Services</i>		<i>Grand Total</i>
	<i>Stretcher</i>	<i>Sitting</i>	<i>Total</i>		<i>Taxis</i>	<i>H.C.S.</i>	
1959	43,927	105,241	149,168		410	1,045	150,623
1958	42,069	106,815	148,884		592	1,100	150,576

Mileage

<i>Bristol Ambulance Service</i>					<i>Supplementary Services</i>		<i>Grand Total</i>
	<i>Ambulances</i>	<i>Dual Purpose</i>	<i>Total</i>		<i>Taxis</i>	<i>H.C.S.</i>	
1959	486,711	255,083	741,794		2,716	5,446	749,956
1958	501,110	253,938	755,084		4,032	9,564	768,644

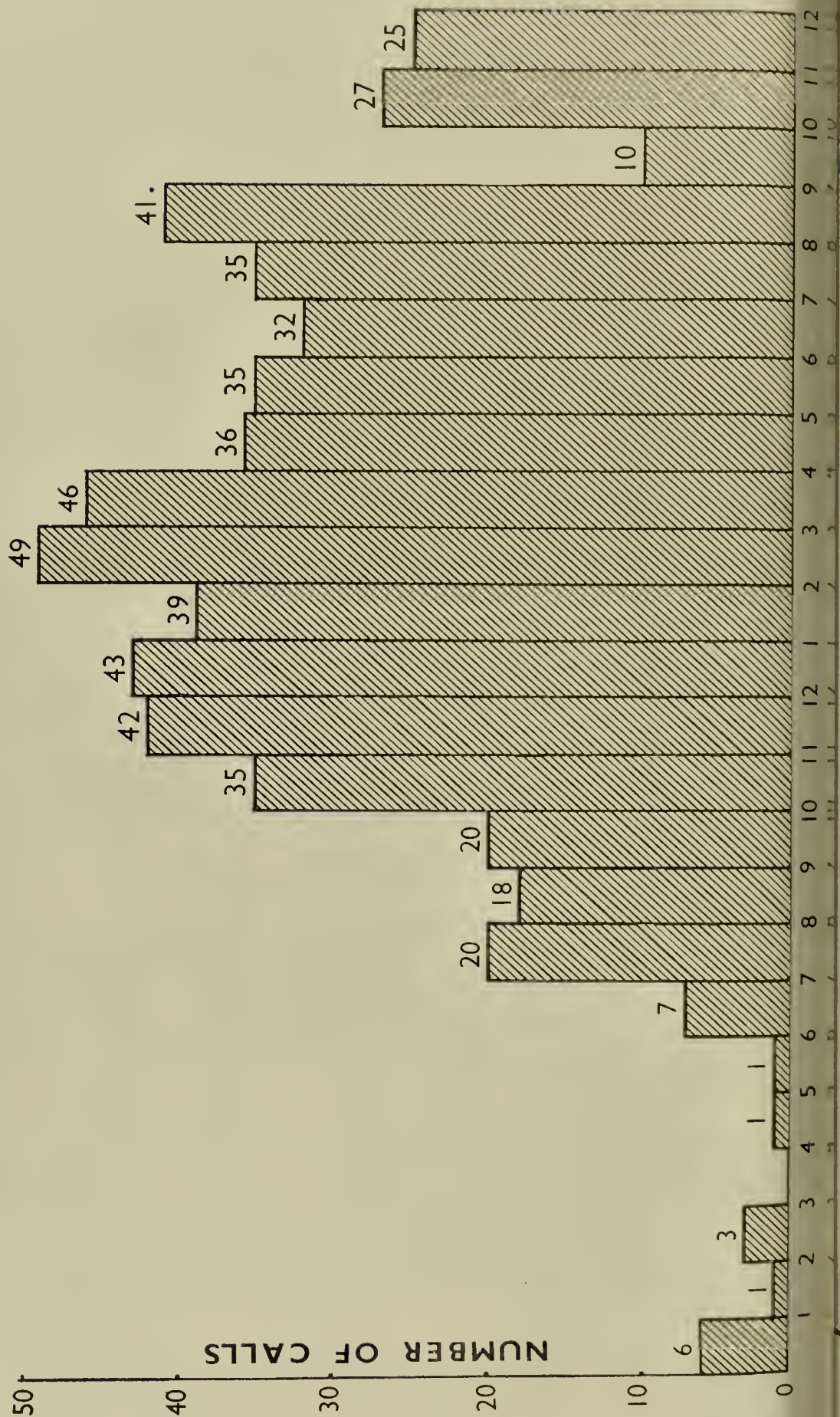
Patients by Rail

1959	Patients	144	Mileage	16,521
1958	Patients	124	Mileage	13,345

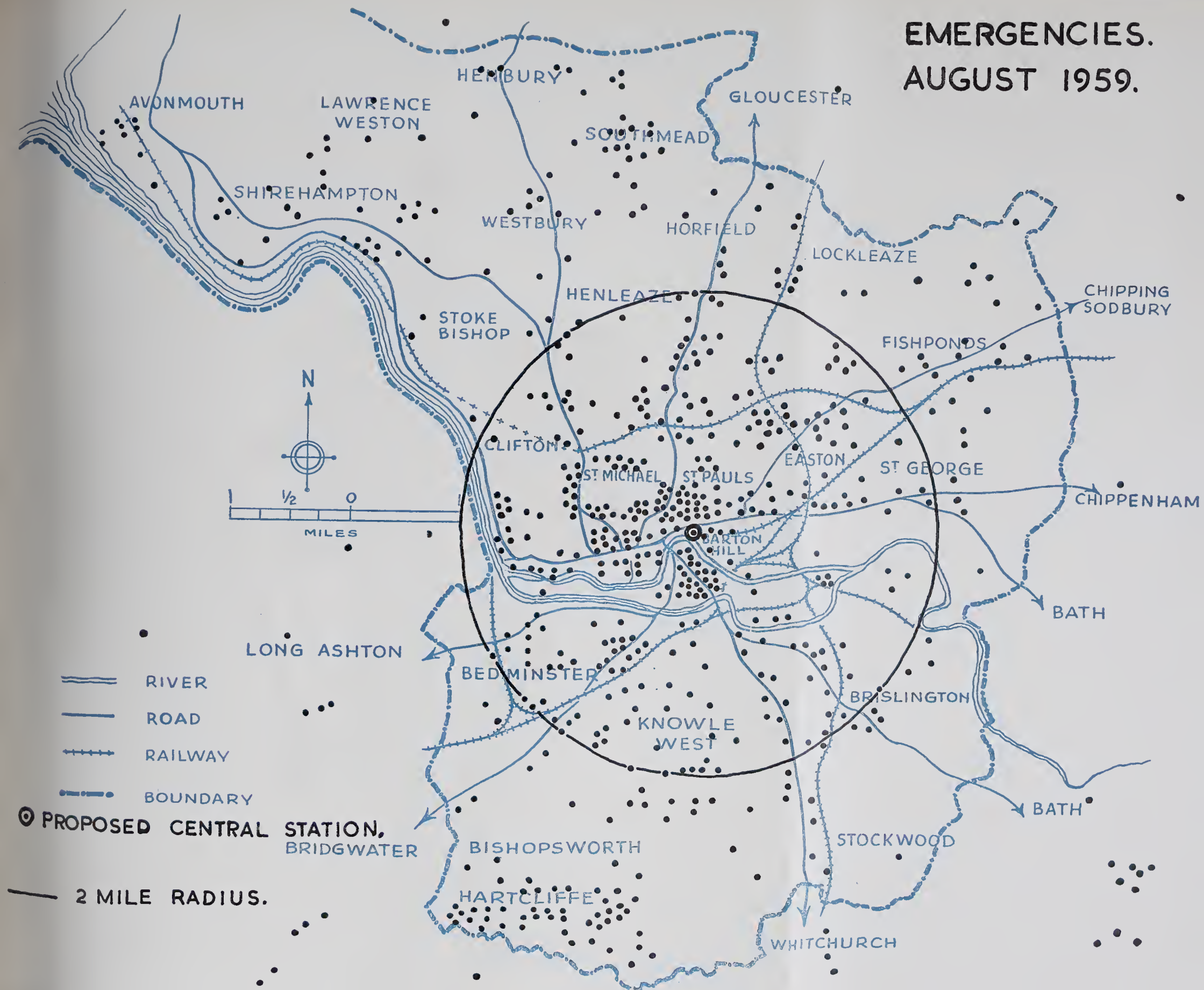
Miles per patient

1959	4.98
1958	5.10

BRISTOL AMBULANCE SERVICE. ANALYSIS OF EMERGENCIES FOR MONTH OF AUGUST, 1959.



EMERGENCIES. AUGUST 1959.



ENVIRONMENTAL HEALTH SERVICES

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ENVIRONMENTAL HEALTH SERVICES

F. J. Redstone, F.R.S.H., F.A.P.H.I.

(Chief Public Health Inspector)

The work of the Environmental Health Services is comprehensive in that health implies promotion of the highest standards of well-being. This has been emphasized by the President of the Royal Society of Health who said that "however effective the treatment of disease the major contribution to the nation's health will rest essentially on preventive measures".

In the pursuit of health for all, many facets of life are touched—our living conditions, our working conditions, our food supplies, the air we breathe, our facilities for leisure—the list is never-ending. All this means that environmental sanitation is complex, has far reaching effects upon the individual, but is not spectacular. Indeed, historically it has been shown that its failure would be more readily apparent than its success. It is against this background that the Public Health Inspectorate carries through its day to day task to play a part in the health team.

The Bristol Health Committee continued its interest in "Radiation and Public Health" and during April the Bristol and West Clean Air Committee held a short conference at the University of Bristol on this subject. Representatives from many local authorities adjacent to Bristol took part in the discussion which was opened by Professor R. C. Wofinden.

Considerable progress was made in the work of cleaning the atmosphere in Bristol and it is a great pleasure to report that the first Smoke Control Area was established in the centre of the City.

The condition of the River Avon, which for many years has carried a heavy load of pollution, gave rise to anxiety and complaints during the spell of very hot weather. It is gratifying to know that the new sewer scheme now well under way will eventually remove all cause for complaint.

The Government's Area Eradication Plan designed to eliminate tuberculosis from cattle in this country is making remarkable progress and the results of this good work by our veterinary colleagues is shown by the decreasing incidence of the disease seen in the abattoirs. The removal of affected animals as areas are dealt with, causes an increase in meat condemned for the time being, but when this phase has been passed, the beneficial results will be manifest.

The number of chemicals of concern to Public Health Authorities is rising as shelf life and attractiveness of food continue as main considerations in the distribution and sale of this commodity. Elsewhere in this report will be found some details on action taken to deal with imported apples contaminated with lead and arsenic.

The meat marking scheme inaugurated on 1st January received a great welcome from the meat trade and has proceeded smoothly throughout the year. The Bristol Health Committee and its Sub-Committee which deals with slaughtering facilities continued its investigations on this subject in readiness for the submission of a report to the Ministry of Agriculture, Fisheries and Food by November, 1960. This involves a great many consultations with adjoining local authorities and trade organisations and perhaps it would be an understatement to record that an assessment of the slaughtering facilities needed in any particular area is not an easy task.

For some years the Bristol Health Committee have made representations about the hazards of condemned meat distributed to pet shops but their hopes that this would at last be satisfactorily dealt with were dashed when the Meat (Staining and Sterilising) Regulations, 1959, were rescinded before they came into operation.

Since the passing of the *Pet Animals Act, 1951*, greater control over these establishments has been exercised by local authorities. During the past year, however, it was decided to make a special review of conditions at all pet shop establishments in this City and the standard of some premises was raised as a result of visits made by Public Health Inspectors and the Corporation's Veterinary Officer.

The heavy rains which occurred at periods during the year caused severe flooding in some areas of the City. All Corporation departments concerned dealt with the aftermath conditions as quickly as possible and special meetings of chief officers were held to see what more could be done to help occupiers of premises subject to flooding.

The Trainee Scheme for Public Health Inspectors continues to assist in the recruitment of these officers and during the year three young men (M. J. Abrams, H. M. Ellis, D. I. Hole) trained in the Department became qualified. In addition, six Public Health Inspectors (M. J. Bartlett, M. D. Benwell, W. E. Griffith, D. A. J. Herbert, J. D. Leeson (Resigned 6.12.59), F. J. Webb.) passed the Meat and Other Foods Inspectors Examination set by the Royal Society of Health.

I would like to record my thanks to all the staff for their excellent work during the year and to those who have contributed to this Report.

PUBLIC HEALTH INSPECTIONS

Sanitation, Housing, Shops Acts, etc.

1958			1959		
Visits	Re-visits	Total	Visits	Re-visits	Total
—	—	3,212	—	—	4,062
4,289	11,814	16,103	4,091	11,666	15,757
4	2	6	4	7	11
2	3	5	3	3	6
132	125	257	188	206	394
1,061	1,286	2,347	1,126	1,541	2,667
146	247	393	148	205	353
37	96	133	49	119	168
183	480	663	210	722	932
56	48	104	62	92	154
323	439	762	482	785	1,267
43	31	74	40	32	72
17	68	85	14	56	70
13	22	35	16	38	54
37	161	198	46	137	183
41	259	300	22	181	203
41	94	135	83	156	239
458	187	645	574	246	820
108	283	391	144	398	542
78	128	206	55	127	182
918	1,146	2,064	758	1,023	1,781
1	16	17	—	—	—
1,390	1,122	2,512	334	1,138	1,472
1,510	—	1,510	2,088	—	2,088

Complaints
Visits:
Dwelling houses
Houses let in lodgings
Common lodging houses
Food shops—Registerable
Not registerable
Other shops
Bakehouses
Workplaces and offices
Factories—Non-mechanical
Mechanical
Outworkers
Removal of aged persons
Offensive trades
Entertainment places
Tents, vans and sheds
Keeping of animals
Food inspection
Sites
Institutions, hospitals, etc.
All other matters
Infectious disease visits
Clean Air Act—Smoke observations
—Smoke Control Areas

1958				1959			
In- timation	Statu- tory	Compliance		In- timation	Statu- tory	Compliance	
		I	S			I	S
350	516	220	324	324	442	213	326
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
1	—	8	—	7	—	2	—
37	—	46	—	68	1	69	2
6	—	15	1	10	1	7	2
1	—	4	—	1	—	4	—
11	—	13	—	18	—	20	—
—	—	—	—	2	—	—	—
13	—	16	1	24	—	30	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
—	—	—	5	—	—	—	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
1	—	—	—	1	—	1	—
1	—	1	—	—	—	—	—
3	—	1	1	1	2	3	1

Notices:—
Dwelling houses (P.H.)
Houses let in lodgings
Common lodging houses
Food shops—Registerable
Non-registerable
Other shops
Bakehouses
Workplaces and offices
Factories—Non-mechanical
Mechanical
Outworkers
Removal of aged persons
Smoke observations
Offensive trades
Entertainment places
Tents, vans and sheds
Keeping of animals
All other matters

Sanitation, Housing, Shops Acts, etc.—Remedial Action

1958		1959
	Drainage Works:—	
76	New drains laid	53
294	Drains repaired	226
737	Choked drains cleared	679
204	Tests made	182
	Sanitary Conveniences:—	
12	Flushing appliances introduced	5
7	Additional closets fitted	32
1	Separate closets for sexes provided	1
23	New pans fitted	15
—	Action re bathroom and geyser vent	—
3	Urinals fitted	2
102	Other works	90
10	Intervening vent space provided	13
1	Cesspools abolished	2
	Water Supplies:—	
2	New and additional installations	5
34	Hot water installed	43
—	Wells closed	—
	Other Sanitary Fittings:—	
7	New sinks fitted	11
1	Additional sinks fitted	1
33	Wash basins provided	51
	Other Works:—	
274	Roofs repaired	176
141	Dampness remedied	91
620	Other new and repair works	337
7	Yards paved and drained	5
17	Houses cleansed—dirty	30
99	—verminous	137
—	Food store installed	1
—	Cooking facilities provided	—
31	Lighting improved	15
14	Ventilation improved	10
2	Meal rooms provided	1
7	Heating provided	10
—	Exhumations	3
	Keeping of Animals:—	
1	Removal of manure	2
—	Provision of manure receptacles	—
—	Drainage provided	—
	Aged and Infirm Persons:—	
2	Removals—voluntary	3
1	—Court Order	1
	Smoke Observations:—	
13	Infringements—dealt with	11
	Noise Nuisances:—	
5	Dealt with	9
	Other Nuisances:—	
199	Dealt with	271
	Food Hygiene Regulations, 1955:—	
145	Miscellaneous requirements	150

Repairs to Property in Owner's Default:

At the beginning of the year one case was outstanding from 1958.

During the year six cases were referred to the Defaults Officer for consideration.

Of these, four were repaired by the Corporation's contractor, one case was not proceeded with and one case was pending at the end of the year.

Five orders were issued to various Corporation contractors and accounts totalling £87. 14s. 2d. were passed for payment.

Works by Agreement under Section 275 of the Public Health Act, 1936:

One such case was referred during the year. An order was issued and an account totalling £48 9s. 7d. was passed.

FACTORIES ACTS, 1937 AND 1948

Inspection of Factories

<i>Premises</i>	<i>Number on Register</i>	<i>Inspections</i>	<i>Number of Written Notices</i>	<i>Occupiers Prosecuted</i>
(1)	(3)	(4)	(5)	(6)
(i) Factories in which sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	178	62	2	—
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	1,089	482	24	—
(iii) Other premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises)	132	462	10	3
Total	1,399	1,006	36	3

Cases in which Defects were Found

<i>Particulars</i>	<i>No. of cases in which defects were:—</i>				<i>No. of cases in which prosecu- tions were instituted</i>
	<i>Found</i>	<i>Remedied</i>	<i>Referred to H.M. Inspector</i>	<i>Found by H.M. Inspector</i>	
(1)	(3)	(4)	(5)	(6)	(7)
Want of cleanliness (S.1)	12	19	—	6	—
Overcrowding (S.2)	—	—	—	—	—
Unreasonable temperature (S.3)	—	—	—	—	—
Inadequate ventilation (S.4)	7	7	—	2	—
Ineffective drainage of floors (S.6)	1	1	—	—	—
Sanitary Conveniences (S.7):—					
(a) Insufficient	18	22	—	—	3
(b) Unsuitable or defective	19	23	—	2	—
(c) Not separate for sexes	—	1	—	1	—
Other offences against the Acts (not including offences relating to Outwork)	3	3	—	—	—
Other works	6	7	—	3	—
Total	66	83	—	14	3

List of Outworkers Received during 1959

<i>Description of Homework</i>	<i>No. of Outworkers</i>	
	<i>February</i>	<i>August</i>
Wearing apparel	12	4
Shoes	1	—
Artificial jewellery	—	—
Gloves	10	7
Others	6	4
Total	29	15

HOUSING

In each of the years 1956 and 1957, 1,300 houses were dealt with under the Housing Acts by procedures involving demolition. The resulting large scale public inquiries was a major cause in the drop to approximately 400 in 1958 and only 143 houses were represented for Clearance Area action during 1959.

It is a condition of any action under the *Housing Act, 1957*, whether taken individually or as respects a group that the Council must be satisfied of unfitness and best method. In some cases difference of opinion has arisen over the application of the standard of fitness, particularly in connection with the relative importance of instability as opposed to other defects.

Not infrequently the Council feels that with a particularly bad group of houses, the rehousing of tenants should take place as soon as possible and in an effort to this end it has resolved to take individual action instead of the more correct, though protracted procedure which follows clearance area representation.

Whether the Council should purchase and repair to a good standard, or demolish and redevelop are questions which result in additional time and work on reinspections, preparation of specifications and cost schedules.

Survey of the Easton Neighbourhood Unit

It is well known that any large clearance programme undertaken by a local authority has its associated problems, not the least of which is the uncertainty felt by owners and occupiers of property not immediately affected by orders. This feeling of insecurity is increased when it is known that, to achieve satisfactory redevelopment, the local authority may use its powers to purchase property compulsorily.

During the past year or two it became increasingly obvious that in the Easton district of the City the uncertainty felt had reached a serious level, and this encouraged the City Council to take special steps to alleviate as far as possible the concern of the residents in this area.

The area, generally, lends itself to redevelopment as a neighbourhood unit and the Planning and Public Works Committee have long-term outline proposals to achieve this final result. The Council considered that accurate assessment of the earliest date of redevelopment of small areas within the neighbourhood unit should be available to enable owners to know the future of their premises.

The Medical Officer of Health was, therefore, instructed to carry out a survey of the houses in this district and to report upon their condition marking those areas which he considered best dealt with by clearance action. The information then available would be considered in the light of existing financial, staff and building commitments and a programme for the area drawn up in some detail.

It was appreciated that a survey of over 4,000 dwellings could not be carried out in great detail in the limited time of five months available for the work. The three inspectors who carried out the survey, therefore, concentrated on inspection and classification of houses with a minimum of written work. Results were illustrated on maps and it was soon apparent that a map would form the major part of the Medical Officer of Health's final report.

The Chief Officers' final combined report will be submitted to the City Council in due course, but it is possible to draw certain conclusions from the Medical Officer of Health's report on the survey:—

1. The survey confirms general impressions of conditions in the area built up in the Environmental Health Section as a result of experience over the years.
2. The percentage of houses which are owner-occupied is, at 66 per cent higher than might have been anticipated.
3. In houses classified fit the percentage of owner-occupied property was almost twice as high as that of unfit property.
4. A survey such as this, even carried out without detailed inspection, is of invaluable assistance in the day-to-day work of the department, but to achieve the result obtained it was necessary to utilise the full time service of three senior inspectors, who were relieved of their normal duties in the clearance programme.
5. It was a source of satisfaction to the staff that in almost all cases access for survey was readily given and that the public health inspector was received courteously. This was confirmation of the fact that, in spite of a large scale clearance programme in the City, the relationship between the general public and the inspectorate is excellent.

Underground Room Regulations

Whilst it is true that existing underground room regulations have to be interpreted reasonably when applied to the great variety of types of underground rooms which are met with in practice, there appears to be little in Bristol to support the Minister's contention, as set out in Circular 38/59 that existing Regulations should be revised (quote)—“to bring them more into conformity with present day standards”.

A close examination reveals the revised model code to be, not a forward step in housing, but a retrograde one and of some concern to Bristol with its estimated 5,000 basement rooms.

The absence of any control over the use to which an underground room is put of itself makes any code based on “use” to be unrealistic, for the use to which a room is put can, and does, change overnight. The whim of the occupier, or pressure by the owner are but two of a host of circumstances which can arise and change the legal picture.

The new code accepts for the first time the use of artificial illumination as a satisfactory means of lighting in certain cases. Can it be said that an underground kitchen so dark that the light has to be left on all day “conforms with present day standards”.

Representations regarding the unrealistic nature of the new code were made to the Minister with a request that Bristol be permitted to continue to use the existing Regulations.

Rent Act, 1957

The commonly held view, that the repair of houses which would precede or follow the increases in rent permitted by the *Rent Act, 1957*, would achieve a substantial improvement in living conditions, was not shared by public health inspectors whose job it is to deal with the old, worn out and sub-standard houses—the product of the industrial nineteenth century.

The *Rent Act, 1957* has been in force for some 2½ years and an analysis of its effects would not be premature. “What does the evidence suggest and what are the trends?”

Admitting, as we must, that much work may have been done of which the Local Authority has no knowledge, an examination of the table below permits the following observations.

- (1) That 99 per cent of the certificates of disrepair issued under the *Housing Repairs and Rents Act, 1954* and which are now at least 2½ years old, still remain effective.
- (2) That 78 per cent of the certificates of disrepair issued under the *Rent Act, 1957* remain effective.
- (3) That the first “surge” for certificates of disrepair following demands for increases in rent soon spent itself.
- (4) That such repairs as have been carried out—in the main— have succeeded only in making the better houses better.

		1957		1958		1959
	<i>Certs. Carried Forward</i>	<i>July to Dec.</i>	<i>Jan. to June</i>	<i>July to Dec.</i>	<i>Jan. to June</i>	<i>July to Dec.</i>
No. of applications	—	213	143	42	28	28
Undertakings accepted	—	54	32	21	6	8
Certificates issued	115	114	126	28	25	12
Certificates cancelled	—	2	18	30	14	5

The following conclusions can be drawn:—

- (a) That owners have made little effort to repair houses of the older type.
- (b) That the objective of preventing the deterioration of the older houses into the “demolition” category has so far failed.
- (c) That the need for a vigorous housing drive to provide good homes either by repair or the provision of new is as great today as it ever was— this is indeed a continuous process.

Demolition

During 1959 a great deal of trouble and anxiety has been experienced in controlling the demolition, by owners of houses which are the subject of Demolition Orders and Clearance Orders and which in turn give rise to questions of rights of support, weatherproofing, and the use of the site.

Where an owner is faced with the demolition of a building at his own expense, it is very natural that he should endeavour to do it as cheaply as possible. To this end many owners will try and do the work themselves; little by little, over a long period accepting the dangers to themselves, the public and adjoining property, as must inevitably accompany lack of experience and essential equipment. Alternatively, a contractor will be employed who, in the hope of adequate reimbursement from the sale of materials, will undertake to demolish very cheaply. No legal contracts are entered into so that it is not unusual for houses to be stripped of salvagable materials, demolished wholly or in part and the rubble left on the site: —questions of support and the making good of damage to adjoining properties are, in many cases ignored.

Whilst it is reasonable having regard to the merit of each case, that an owner or contractor be afforded every opportunity of completing a demolition once commenced, no time should be lost in using default powers where the statutory periods for demolition have expired. This type of case is less difficult to deal with than that where demolition has been completed and large quantities of rubble have been left on the site; —no attention having been given to sealing off of drains, repairing damage, support etc.

In the absence of a definition there has always been legal uncertainty as to the meaning of “demolition” and whilst we have the County Court Case of *Bacup Corporation v O'Neill (1939)* to guide us in concluding that demolition means “down to the ground”, there is still some doubt as to whether “demolition”

includes the removal of rubble from the site. Some say "yes" and others say "no"; the former basing their opinion on the argument that the Local Authority in the exercise of their default powers can do only that which the *Housing Act* requires an owner to do, and secondly that the responsibility of the Local Authority to sell materials implies clearance of the site. "Does 'demolition' also include the provision of support, the repair of damage, bricking up of fireplaces, the flaunching of offsets etc.,?" If it does then the Local Authority can act in default.

The varied and unauthorised uses to which void sites are put is another matter of great concern. Maybe we can close our eyes a little to the nuisances which accompany bonfires on Guy Fawkes night, but such a tolerant view cannot be taken when void sites are used for the deposit of rubbish of all kinds; as parking spaces for cars and lorries or "cemeteries" for worn out and derelict vehicles.

The meaning of "demolition" and the control of the resulting sites are matters of great concern to local authorities generally. A solution on a national basis should not be too long delayed.

The Case of the Old Lady

Cases do arise from time to time when one is forced to doubt the effectiveness of the *Housing Act, 1957*, in the face of the many human and social problems with which we become involved. The old lady of 80 who refused to be helped was a case in point.

She lived in her own house—her sole companion a dog. A brother and sister were old, estranged. There was no one who really cared; no one whose permanent care she would accept. The house was unfit—seriously so—and the side and rear walls and water closet compartment imminently dangerous. Offers of accommodation by the Local Authority in an old peoples home were politely—but firmly—refused. She could not be compulsorily removed under the *National Assistance Acts* because—withstanding her age—she could devote to herself the necessary care; there was no sign of infirmity.

The Local Authority were forced to apply to the Court for an order to enable them to take immediate action to remove danger and walls were replaced by timber strutting, tarpaulins and corrugated iron. But the Court Order for removing danger could not include the power to evict; so parallel action under Section 16, *Housing Act, 1957* was taken with the ultimate object of a further application to the Court for an eviction order. All for her good.

As things worked out she did have a fall or two, and the Medical Officer of Health felt justified in applying to the Court for an Order to remove her forcibly to a home where she could be looked after. But in the absence of further court orders at intervals she could return "home".

The case of the old lady of 80 who refused to be helped has yet to be closed. A proposal to include power in a new *Bristol Corporation Act* which would have enabled the Local Authority to deal with cases of this kind was not approved at a public meeting held to consider and vote on the various clauses.

Housing Notes

1. During the year 2,500 enquiries were made respecting the future "life" of properties.
2. Of the 2,908 houses dealt with since 1954, and which have been the subject of Ministerial inquiry, only 0.75 per cent were reclassified by the Minister.
3. There was an increase in the number of emergency rehouseings from dangerous dwellings.

4. The policy of obtaining from owners a written promise "not to re-let" in cases where re-housing is necessary in advance of the confirmation of an order, has worked well.
5. The Compulsory Purchase Orders made in the Kingsdown area in respect of which there was national as well as local criticism were confirmed without modification as far as the pink properties were concerned.
6. The number of owner-occupied houses in Clearance Areas has increased.
7. There is growing evidence that the problems associated with houses-let-in-lodgings will soon have to be faced realistically.
8. The redevelopment of the sites of Clearance Areas by the construction of flats, particularly towards the centre of the City is receiving increased attention.
9. The inability of owners to meet the costs involved in the repair of the older properties in the City is reflected in the large number of such houses being offered to the Corporation. Houses too large for modern family needs are being offered in increasing numbers.
10. Court action in respect of two cases of illegal occupation were taken during the year.
11. The Council decided to purchase and repair or demolish as appropriate, any fit houses which had been left isolated by the demolition of its neighbours following Clearance Area action.

Housing and Sanitation

1958		1959
	Houses Inspected:—	
—	Section 9	—
72	Section 16	140
607	Clearance Area	126
9,719	Visits for improvement grants, estimated life and other matters	10,310
	Represented to Committee:—	
—	Section 9	—
72	Section 16	140
371	Clearance Area	209
	Orders made:—	
8	Demolition Order—(Section 17, <i>Housing Act, 1957</i>) ..	23
45	Closing Orders—Whole house (Section 17, <i>Housing Act, 1957</i>)	69
2	Closing Orders—Whole house (Section 17, SS. 3, <i>Housing Act, 1957</i>)	—
15	Closing Order—Underground rooms and parts of buildings (Section 18, <i>Housing Act, 1957</i>)	37
—	Closing Orders substituted for Demolition Orders—(Section 35, <i>Housing Act, 1957</i>)	10
2	Undertakings to repair accepted—(Section 16, <i>Housing Act, 1957</i>)	1
4	Undertakings not to use—(Section 16, <i>Housing Act, 1957</i>)	—
16	Undertakings to demolish—(Section 3 SS.4 <i>Financial Provisions Act, 1958</i>)	9
	Houses Repaired:—	
—	Section 9—informal	—
—	Section 9—formal	—
—	Section 9—formal by Corporation in default	—
1	Undertakings to repair	4
4	Undertakings not to use, cancelled after repair	6
—	Other repairs	2
16	Closing Orders determined after repair	27
2	Demolition Orders cancelled	—
147	Certificates of Disrepair	37
39	Revocation of Certificates of Disrepair	19
—	Refusal of Certificates of Disrepair	1

FOOD INSPECTION

Slaughtering Facilities

No new slaughterhouses were constructed and it was found that the existing facilities were adequate to deal with the throughput experienced during the year. The facilities provided at the Public Abattoir, Gordon Road, enable butchers to present animals for slaughter and this service is given by a contractor who is employed by the Local Authority for that purpose.

Hotwells slaughterhouse is leased by the Local Authority to the Mutual Meat Traders Ltd., who kill and wholesale meat on their account and on occasions, they also slaughter animals for butchers who buy in the live market.

Pigs for the bacon trade are slaughtered in the four private slaughterhouses attached to bacon factories.

The total number of animals killed in the City shows a downward trend of about 1 per cent. Cattle show a decrease of 14·5 per cent (21,208 to 18,030) the principal drop being at Hotwells where a fall of approximately 23 per cent was experienced. This was mainly due to the drop in the number of cattle sent in during the year under the Tuberculosis Eradication Order. In the previous year the eradication order covered Dorset, Somerset and Wiltshire and this year the Gloucestershire area was involved. Considerably less cattle came into the City under this new Order than under the previous one. The number of reactor cattle sent into Bristol was 760 of which 232 or 30·5 per cent were totally rejected as unfit for human consumption. Of the 760 cattle sent in, approximately 80·0 per cent were found on post mortem examination to be affected in some degree with tuberculosis. Of the 32 calves sent in 62·0 per cent were found on post mortem with tuberculosis. Of the 32 calves sent in 62·0 per cent were found on post mortem examination, to be affected, and 16 of the 32 were totally rejected. These figures show what a worth while job the eradication orders are doing and we are fast approaching the time when tuberculosis may be difficult to find in the bovine specie. This state of affairs will be welcomed by everybody except perhaps those who are responsible for the collection of specimens for demonstration and examination purposes. The total number of calves killed was slightly less (2,787 to 2,647).

The number of sheep slaughtered in the City has arisen by approximately 15 per cent (60,069 to 69,110). The greatest increase was in the number killed at the Abattoir, approximately 29 per cent (20,126 to 26,107) as against approximately 7 per cent increase at Hotwells (39,943 to 43,003). It is generally agreed that this increase was primarily due to the very dry season which resulted in an absence of grass for the sheep thus forcing the farmer to send his stock in for slaughter. This may be followed by a decreased kill next year.

The pig trade showed a big decline in the number slaughtered, the bacon factories being the worst hit, a 15 per cent drop (14,393 to 12,130) as against 14 per cent for the rest of the City (35,998 to 31,957). Bacon factories are experiencing difficulties and it will probably mean that unless there is a substantial increase in the throughput of the bacon factories some of the smaller ones might well close down, especially when they realise what they will have to spend on their premises to bring them up to the standard of the Slaughterhouse Hygiene Regulations. The number of porkers slaughtered at the Abattoir fell slightly (14,732 to 14,070) but there was an approximate drop of 20 per cent at Hotwells (21,266 to 16,887).

Generally it would seem that it has not been a very good year for the trade if the total number of animals slaughtered is any criterion.

Slaughterhouses including Bacon Factories

The past year has not seen very much progress with regard to the hygienic standards of slaughterhouses in relation to the Slaughterhouse Hygiene Regulations. A report has to be submitted to the Minister by November 5th 1960 on the future requirements for slaughtering facilities in the City, and the suggested appointed day when all the provisions of the Regulations shall come into force. All the slaughterhouses have been inspected and it is clear that they require varying amounts of work to be done to bring them up to standard. It has been stated that the Government will publish a review of the pig industry in February, 1960 and this will have a direct bearing on whether bacon factories will continue to slaughter their own pigs for bacon production.

Conditions are such that at present very few bacon factories could afford to bring their premises up to the necessary standards taking into consideration the very low number of bacon pigs being slaughtered. It is hoped that the position will very soon be clarified so that some real progress can be made.

One Management continued to improve their large bacon and small goods factory. During the past year they have installed a new scalding tank and hair singer, the pie room has been extended and experimental work carried out with an electric magnet for the detection of foreign metal objects in sausages. Considerable expenditure will have to be laid out on the slaughterhouse to bring it up to the required standard and in an endeavour to reduce the high cost of the lighting requirements at the Inspection Area, some alteration to the existing line dressing is contemplated.

It was considered that the Public Abattoir fell short of requirements of the regulations in two items only:— (a) the absence of a detention room and (b) the lighting does not come up to the required standard. Item (a) has now been provided.

It frequently happens in the course of meat inspection that an immediate decision cannot be made and it is necessary to allow meat to hang overnight before a final assessment can be made. Thus the purpose of the Detention Room is for the retention of carcasses and offal which are suspect, in a place where there is no fear of contamination from diseased meat. A suitable room was constructed having washing facilities for the Meat Inspector and a post mortem slab for the detailed inspection of meat and offal.

Item (b) is under review.

The Abattoir was again extensively used for lectures and demonstrations to students taking the various courses viz:— D.P.H., 4th and 5th year veterinary students, 2nd year P.H.I. students, inspectors attending the Meat and Other Foods Course etc. A number of students, doctors and technicians from overseas have been taken over the Abattoir and all have expressed admiration at the standard of hygiene prevailing there. It is hoped that in the near future a suitable lecture room will be provided for the benefit of students and lecturers using the Abattoir for educational purposes. This accommodation would also be useful for occasional Health Committee Meetings and would avoid the use of the Slaughtermen's Mess Room for this purpose.

Meat Inspection

The aim of most local authorities is to maintain a 100 per cent meat inspection service. This has again been achieved this year through a resident inspector at the Abattoir, adequate coverage at the bacon factories and a panel of inspectors at Hotwells. Owing to the sudden death, last Easter, of R. Brooks, resident meat inspector at Hotwells for a number of years, a panel of inspectors have carried out the meat inspection duties at Hotwells. Extra work was

involved but due to the good will of everybody concerned current problems were successfully overcome.

Trainee inspectors particularly those well advanced in their training have done a very good job of work in giving general assistance at the slaughterhouses and proved that the scheme is very worth while. It is still a regrettable fact that Sunday slaughter has been fairly regular and this together with variable starting and finishing times has meant that meat inspection duties have at times, involved long and awkward hours.

Professor K. E. Cooper, Professor of Bacteriology, and his staff at Canynge Hall have been very co-operative in assisting us in the diagnosis of obscure conditions. The submission of specimens to Dr. Crofton, Zoology Department, University of Bristol, has again been a feature of this year's work. A total of 724 specimens have been submitted for a digestion and microscopical test for the detection of *Trichinella Spirallis*. Out of a total of 2,107 specimens submitted during the past few years only 5 positive results have been found which again confirmed the opinion that the incidence of this parasite is so very slight that this type of examination of each pig is not yet warranted.

The number of bovine animals found on post mortem examination to be affected with *Cysticercosis* shows a decrease on last year (122 to 99) but in view of the decreased number of bovine animals slaughtered the percentage decrease is only very slight (0.57 to 0.54 per cent). All the carcasses were submitted for cold storage treatment before being released for human consumption.

A system of meat marking has been introduced into the Public Abattoir and Hotwells with the full approval of the Minister and the trade. Each authorised inspector has his own stamp and number and after a carcass has been stamped it indicates that that particular carcass has been found on both ante and post mortem inspection to be free from disease. The stamp is in no way an indication of quality but only that it was free from disease at the time of slaughter. Difficulty has been experienced in getting a legible stamp mark on a cool or cold carcass, experiments have been made with different types of stamps, pads and inks and it is hoped that these difficulties will soon be resolved.

Meat Depots

Meat depots in the Old Market Street area continue to function and handle considerable quantities of imported frozen and chilled meats and offals. Regular deliveries of Irish beef and lamb come into the City which are of good quality and transported in sealed containers. Seals are only broken at the depot and complaints are then the responsibility of the exporting depot and not the lorry driver. The forequarters and hindquarters are always hung and it is only occasionally that one finds that a string has broken. Regular early morning visits are made to the depots to check as far as possible English meat killed outside the City; here our own system of meat marking has helped considerably. A London firm of poultry dealers has recently opened a store in the Old Market Street Area. No evisceration is done on the premises which are of a very good standard.

Meat Transport

Early morning visits are also made to check the condition of the lorries bringing frozen and chilled meat into the City. Generally speaking, the meat hauliers are doing a satisfactory job but some butchers have to be continually reminded to bring and use duck boards in their vans and to provide impervious containers to hold their offals.

Canteens

Spot visits are continually made to the kitchens of the school meals service to check the quality of the meat supplied. Successful proceedings were instituted against one of the suppliers because a cigarette end was found in some stewing beef on arrival. The firm were fined £25 0s. 0d. with £2 2s. 0d. costs.

Knacker's Yards

Two premises are licenced as knacker's yards in the City and both have had their licences renewed. The owners of one knacker's yard continue to improve their premises. Very few animals are slaughtered on these premises and licences are only required because of the odd occasions when a live animal has to be dealt with.

Piggeries

Piggeries have not received the number of visits intended but this has been due to staff difficulties. All those operating piggeries on Corporation property were notified last year of their obligations to keep their premises up to a reasonable standard. Minimum requirements were asked for and tenants were told that failure to carry out our requests could lead to their being given notice to quit. The majority of the tenants have brought their piggeries up to a reasonable standard and follow up visits will be necessary to see that this standard is maintained. Piggeries on private land have yet to be dealt with but it is hoped that this work can be tackled in the near future.

Cold Stores

Most of the alterations to a large cold store, mentioned in last year's report, have now been completed and the store has been brought up to a reasonable standard. Very little trouble was experienced in the cold stores this year except for the occasional carcase affected with black or white mould. No major attack was experienced at any time and only 15—20 carcasses required re-conditioning.

Miscellaneous

In anticipation of the Meat (Staining and Sterilisation) Order, 1959, a visit was made to all the pet animal shops in the City to ascertain how much raw meat was being sold and the source of supply. This Order was unfortunately revoked in March and no similar Order has, as yet, been placed on the Statute book.

Legislation

New legislation which came into operation during the year included:—

The Meat (Staining and Sterilisation) Regulation, 1959, (revoked in March, 1959).

The Slaughterhouse Reports (Appointed Day) Order, 1959.

The Tuberculosis (Wales and Southern England Attested Area) Order, 1959.

The Tuberculosis (Slaughter of Reactors) Amendment Order, 1959.

Inspection of Meat and Other Foods

1958					1959
	<i>Visits:</i>				
1,478	Slaughterhouses and bacon factories	..	..	..	1,465
47	Butchers' shops	..	..	..	50
2,568	Fish shops	..	..	..	2,767
88	Food preparing premises	..	..	..	43
1,281	Meat markets	..	..	..	1,201
—	Street traders	..	..	..	—
275	Schools/Institutions	..	..	..	213
252	Cold stores	..	..	..	224
586	Other premises	..	..	..	557
	<i>Remedial action:</i>				
—	Slaughterhouses cleansed	..	..	..	—
—	Slaughterhouses rebuilt, repaired or altered	..	..	..	—
—	Sanitary defects, etc.	..	..	..	—

Fish and Canned Foods Condemned

		<i>Fish</i>					<i>Other Foods</i>			
		<i>Tons</i>	<i>cwt.</i>	<i>qrs.</i>	<i>lb.</i>		<i>Tons</i>	<i>cwt.</i>	<i>qrs.</i>	<i>lb.</i>
1958	..	5	10	0	23	55	7	2	11	
1959	..	10	18	3	26	43	7	1	13	

Meat Inspection—Animals Examined

<i>1958</i>					<i>1959</i>				
<i>Hotwells Lairs</i>	<i>Abattoir</i>	<i>Bacon Factories and City</i>	<i>Total</i>		<i>Hotwells Lairs</i>	<i>Abattoir</i>	<i>Bacon Factories and City</i>	<i>Total</i>	
7,484	13,724	—	21,208	Beasts	5,717	12,313	—	18,030	
823	1,964	—	2,787	Calves	662	1,985	—	2,647	
39,943	20,126	—	60,069	Sheep	43,003	26,107	—	69,110	
21,266	14,732	14,393	50,391	Pigs	16,887	14,070	12,130	43,087	
2	—	—	2	Goats	—	4	—	—	
69,518	50,546	14,393	134,457		66,269	54,479	12,130	132,878	

Total Weight of Meat Condemned

<i>1958</i>					<i>1959</i>			
<i>Tons</i>	<i>cwt.</i>	<i>qrs.</i>	<i>lb.</i>		<i>Tons</i>	<i>cwt.</i>	<i>qrs.</i>	<i>lb.</i>
106	5	2	27	Hotwells Lairs	64	11	1	27
220	18	2	13	Abattoir	131	5	2	7
12	10	3	18	Bacon Factories	9	3	0	18
6	18	2	5	Butchers shops and City	8	2	2	22
346	13	3	7		213	2	3	18

Meat destroyed from:—

<i>1958 Tons</i>		<i>1959 Tons</i>
125.71	Slaughterhouses and Shops	92.69
220.90	Abattoir	131.73
—	Cold Stores	—
60.89	Fish, poultry, vegetables, etc.	43.49

Carcases and Offal Inspected and Condemned in Whole or in Part

	<i>Cattle excluding Cows</i>	<i>Cows</i>	<i>Calves</i>	<i>Sheep and Lambs</i>	<i>Pigs</i>	<i>Horses</i>
Number killed (if known) ..	9,928	8,102	2,647	69,110	43,087	—
Number inspected	9,928	8,102	2,647	69,110	43,087	—
<i>All diseases except tuberculosis and Cysticercosis:—</i>						
Whole carcases condemned. .	23	53	14	192	302	—
Carcases of which some part or organ was condemned. .	4,752	5,186	20	8,953	5,050	—
Percentage of the number inspected affected with disease other than tubercu- losis or <i>Cysticercosis</i> ..	47·76%	64·01%	0·75%	12·95%	11·72%	—
<i>Tuberculosis only:—</i>						
Whole carcases condemned. .	44	215	14	—	19	—
Carcases of which some part or organ was condemned. .	228	640	14	—	785	—
Percentage of the number inspected affected with tuberculosis	2·29%	7·89%	0·52%	—	1·82%	—
<i>Cysticercosis:—</i>						
Carcases of which some part or organ was condemned. .	64	35	—	—	—	—
Carcases submitted to treat- ment by refrigeration ..	64	35	—	—	—	—
Generalised and totally con- demned	—	—	—	—	—	—

Carcases Condemned

	Hotwells Lairs				Abattoir				Bacon Factories/City				Total			
	T.B.		Other		T.B.		Other		T.B.		Other		T.B.		Other	
	1958	1959	1958	1959	1958	1959	1958	1959	1958	1959	1958	1959	1958	1959	1958	1959
Cows	92	60	35	13	385	155	29	40	—	—	—	—	477	215	64	53
Part Carcases	30	5	6	5	8	3	4	2	—	—	—	—	38	8	10	17
Other Bovines	9	7	3	1	116	37	18	22	—	—	—	—	125	44	21	23
Part Carcases	10	6	5	2	7	4	6	10	—	—	—	—	17	10	11	12
Calves	3	—	3	8	13	14	—	6	—	—	—	—	16	14	3	14
Part carcasses	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1
Sheep	—	—	60	111	—	—	51	81	—	—	—	—	—	—	111	192
Part carcasses	—	—	25	20	—	—	1	1	—	—	—	—	—	—	26	21
Pigs	4	1	150	158	17	8	125	124	6	10	43	20	27	19	318	302
Part carcasses	1	1	34	24	9	2	35	25	—	3	21	6	10	6	90	55
Total	108	68	251	291	531	214	223	279	6	10	43	20	645	292	517	584
Part carcasses	41	12	70	52	24	9	46	38	—	3	21	6	65	24	137	96
Weight in lb.	45519	29193	27624	19895	187704	91862	37739	45391	919	1578	6800	2841	234142	122633	72163	68127
Part carcasses	4989	1630	2258	1976	2409	1488	3067	2635	—	82	265	211	7398	3200	5590	4822

Schedule of Whole Carcasses and Part Carcasses Condemned indicating Disease or Condition

				Cows		Steers and Heifers		Calves		Sheep		Pigs	
				Car- case	Part Car- case	Car- case	Part Car- case	Car- case	Part Car- case	Car- case	Part Car- case	Car- case	Part Car- case
Abscess	..	..	..	—	1	—	1	—	1	4	11	14	10
Anaemia	..	..	..	—	—	—	—	1	—	2	—	—	—
Arthritis	..	..	..	—	—	—	—	—	—	—	—	3	6
Bruising	..	..	..	2	4	—	3	1	—	3	2	—	8
Cornybacterium	..	..	..	—	—	—	—	—	—	—	—	4	16
Emaciation	..	..	..	9	—	—	—	—	—	101	—	3	—
Fevered	..	..	..	—	—	—	—	—	—	1	—	32	—
Immature	..	..	..	—	—	—	—	2	—	—	—	—	—
Jaundice	..	..	..	—	—	1	—	3	—	1	—	—	—
Johne's/Disease	..	..	..	5	—	2	—	—	—	—	—	—	—
Lymphadenoma	..	..	..	—	—	1	—	—	—	—	—	—	—
Malignant Neoplasms	}	..	..	2	—	—	—	1	—	—	—	—	—
Mastitis				1	—	—	—	—	—	—	—	—	—
Metritis	..	..	..	—	—	—	—	—	—	—	—	1	—
Moribund	..	..	..	1	—	—	—	—	—	19	—	8	—
Maggots	..	..	..	—	—	—	—	—	—	1	—	—	—
Oedema	..	..	..	10	—	—	—	2	—	33	—	20	—
Osteomyelitis	..	..	..	—	—	—	—	—	—	—	—	1	—
Pericarditis	..	..	..	—	—	3	—	—	—	—	—	—	—
Peritonitis	..	..	..	2	2	3	6	—	—	—	—	6	3
Pleurisy	..	..	..	4	—	2	2	1	—	18	8	26	12
Pleurisy/Peritonitis	..	..	..	12	—	5	—	—	—	5	—	71	—
Pyæmia	..	..	..	—	—	3	—	—	—	—	—	16	—
Pyelonephritis	..	..	..	—	—	1	—	—	—	—	—	1	—
Pneumonia	..	..	..	—	—	—	—	2	—	1	—	1	—
Pyrexia	..	..	..	—	—	—	—	1	—	—	—	1	—
Pig/paratyphoid	..	..	..	—	—	—	—	—	—	—	—	58	—
Septicaemia	..	..	..	4	—	2	—	—	—	2	—	3	—
S/Frysipelas	..	..	..	—	—	—	—	—	—	—	—	6	—
S/Fever	..	..	..	—	—	—	—	—	—	—	—	20	—
Toxaemia	..	..	..	1	—	—	—	—	—	—	—	—	—
Urticaria	..	..	..	—	—	—	—	—	—	—	—	7	—
Uraemia	..	..	..	—	—	—	—	—	—	1	—	—	—
TOTAL				53	7	23	12	14	1	192	21	302	55
Tuberculosis				215	8	44	10	14	—	—	—	19	6
GRAND TOTAL				268	15	67	22	28	1	192	21	321	61

Cattle affected with Cysticercosis:—

Cows 35; Steers and Heifers 64.

MILK AND FOOD INSPECTION

Legislation

The Milk and Dairies (General) Regulations, 1959

The regulations amend similar Regulations of 1949. They abolish plural registration where dairymen trade in areas of different authorities; copy the Food Hygiene Regulations with regard to hygienic practices by personnel; prohibit the improper use of churns used for milk and amend the powers of the Medical Officer of Health to deal with infected milk.

The Ice Cream (Heat Treatment etc.) Regulations 1959

These permit for the first time a method of ice-cream manufacture by sterilization of the mix at 300°F., for 2 seconds and there are special requirements in respect of the plant used. The Regulations enable a manufacturer to sterilize ice-cream and transport it to some other place for freezing provided the mix is placed in sterile air-tight containers.

Water ices and ice lollies having pH value above 4.5 are now subject to the heat treatment regulations.

The Food Standard (Ice Cream) Regulations, 1959

The regulations stipulate that in any ice-cream sold as "Dairy Ice Cream", "Dairy Cream Ice" or "Cream Ice" or similar description, the minimum 5 per cent fat must be milk fat with 7½ per cent milk solids other than fat. In other types of ice-cream the fat need not be derived from milk.

No ice-cream of any description may contain artificial sweetening material, sugar being excluded.

The Labelling of Food (Amendment) Regulations, 1959

These stipulate that no one may sell pre-packed ice-cream under a description suggestive of anything connected with the dairy interest unless the fat used in its manufacture is milk fat.

Other types of pre-packed ice-cream must bear a label with the words "contains non-milk fat" or "contains vegetable fat". These provisions also apply to a pre-packed article of composite food which contains ice-cream and to advertisements relating to ice-cream.

The Condensed Milk Regulations, 1959

These revise the descriptions and labelling of containers of condensed milk.

The Arsenic in Food Regulations, 1959

These regulations lay down limits to the amount of arsenic permissible in food for sale for certain specified foods. In the case of non-specified foods, with certain exceptions, the arsenic content must not exceed 1 p.p.m.

Food certified by a Public Analyst as contravening these Regulations may be seized and destroyed under the provision of the *Food and Drugs Act*.

The Fluorine in Food Regulations, 1959

These Regulations, operative on the 14th March, 1960, reduce, from existing maxima, the amounts of fluorine permitted in specified foods. Food infringing these Regulations may be seized and destroyed by order of a magistrate.

The Tuberculosis (Wales and Southern England Attested Area) Order, 1959

This Order, under the *Diseases of Animals Act 1950*, is made consequent upon the Minister of Agriculture, Fisheries and Food being "satisfied that tuberculosis of cattle is for practical purposes non-existent therein, is hereby declared to be an Attested Area for purposes connected with the control of tuberculosis."

The Areas embraced many localities coming within the title of the Order, including Bristol, Bath, Gloucestershire, Somerset and Wilts.

Matters of Special Interest

Chocolate cream

A communication was sent to a chocolate manufacturing Company respecting several complaints made to the Department about the discovery by customers of insects in chocolate cream. It transpired that they were larvae of the cocoa flour moth and the Company had appointed an entomologist to deal with this and similar infestations.

Apples—Arsenic and Lead

A random sample of Italian apples disclosed the presence of excessive lead and arsenic. This followed the earlier discovery elsewhere of the same condition in Jordanian apples sent to Bristol.

Investigations regarding the Italian apples revealed that some at least are transported overland in railway trucks and it would appear that they get little if any attention upon import into this country. They had been widely distributed and after securing the original samples, no more were available.

“An apple a day keeps the Doctor away”—but this was not really applicable to a consignment of apples which reached the City in November.

The apples had arrived at Southampton Docks from the Lebanon. The ship discharged some 1,600 boxes of these apples and some 800 were forwarded to Bristol. The consignment was found on sampling at Southampton to contain 9 p.p.m. lead and 3 p.p.m. arsenic. It is understood that the balance of the shipment was found to be satisfactory.

Immediately upon receipt of the above information the local merchant was visited and further samples taken and submitted to the City Analyst. It was also ascertained that 453 boxes had already been sold or distributed throughout the West Country and South Wales and that 347 remained in Bristol. The wholesaler readily agreed to withdraw them from sale pending further investigation.

The Medical Officers of Health of Cardiff, Methyr Tydfil, Bridgwater, Barnstaple, Bideford and Torquay were notified by telephone and letters were sent confirming the information.

In view of the perishable nature of the commodity the City Analyst expedited the analyses. These confirmed the contamination found at Southampton, arsenic ranging between 0.1 and 6.9 p.p.m. and lead 1.9 and 36.0 p.p.m. The legal maximum arsenic content is 1 p.p.m. (Arsenic in Food Regulations, 1959) and lead 2 p.p.m. as per Food Standards Committee's Recommendation. Of 22 samples examined all except 3 exceeded the arsenic limit and only 1 was below the recommended figure of 2 p.p.m. for lead.

A conference with the importers was arranged at which their wish to carry out “decontamination” by washing in a 2½ per cent solution of hydrochloric acid and water was agreed to. The method of treatment had been used some two years ago to deal with similarly affected apples from the same country. It involves 10 minutes in the acid solution and 10 minutes rinsing in cold running water. A trial run was carried out at the premises of the Bristol merchant and samples of washed apples were tested by the City Analyst. Results showed a general reduction of both lead and arsenic but neither was reduced to the minimum figure required.

Similar treatment was also carried out by another local authority and it is interesting to note that the results obtained there gave a greater reduction of contaminants. This was probably due to the use of a small quantity of detergent in the washing solution. The addition of a detergent was considered here but

as this would remove the apples' natural wax coating, with possible detrimental result to the keeping quality it was not adopted in the Bristol washing process. The task of washing such a large quantity of apples was a formidable one, being slow and expensive and would have entailed thorough checking of results before release of the fruit.

Eventually the importer undertook to re-export the consignment involved and all 800 boxes were returned to Southampton and shipped to France.

Soda water

A sample of soda water was reported as 95 per cent deficient in sodium bicarbonate. Upon visiting the local factory with the Public Analyst, it was revealed that the addition of soda to the water was not properly controlled and there was insufficient agitation of the mixture. This was pointed out to the manager who undertook to improve the method of manufacture.

Processed cheese

Samples of this commodity were found to contain more moisture than that recommended by the Food Standards Committee of the Ministry of Agriculture, Fisheries and Food. Upon pointing this out to the manufacturers they decided to re-label the product as "cheese spread"—in which the moisture content is not critical.

"Bread and butter"

This was being served in cafes. The Public Analyst reported the butter as a mixture of butter and margarine. The facts were reported to the Town Clerk who issued a written warning.

Milk supplied to a Bristol Hospital

Early in the year the Department was informed that a Hospital Committee wished to be satisfied as to the quality of milk supplied. It is pasteurised milk and arrangements were made to submit reports on quarterly samples, all of which have been satisfactory.

Milk vending machines

There has been an increase in the number of these machines established in various parts of the City, during the year.

Some people consider that sales of milk from machines are "catering sales" and that the owners do not need to hold licences to sell designated milk, under the provisions of the *Food and Drugs Act*. The Chief Public Health Inspector does not entirely agree with this view. Three such machines are known to have been installed in Bristol, one in a factory, one at Temple Meads Station and the other at the Central Bus Station but there are, at present, 19 other machines established at various sites in the City; some sell T.T. milk and some pasteurised milk. Licences have been issued to the owners of these machines. Knowledge of their whereabouts has enabled us to secure samples from them regularly and certain irregularities coming to light have, in consequence, been remedied.

Imported meat products

By liaison with the Port Health Inspectors samples were secured in the City of frozen meat steakettes, steak burgers and shredded beef steaks and submitted for bacteriological examination.

Salmonellae typhimurium was isolated from one sample and several of the others revealed *clostridium welchii* and coagulase positive *staphylococcus*

aureus organisms. The matter was taken up with the importers, who agreed to take steps to eliminate undesirable bacteria.

Coloured bread

A minor sensation was caused by the sale, in a large City emporium of bread having three striking colours in pastel shades. The Public Analyst reported the colours to be among those permitted by The Colouring Matter in Food Regulations. As anticipated, however, the effect must have been revulsion rather than favour because the sale of this bread was soon abandoned.

Ruskit sausage filler

A routine sample of sausages disclosed the addition of preservative and enquiry from the butcher revealed that he was using a filler to which a permitted preservative had been added. The ruskit was sold to him in a packet labelled "sterilized seasoning" and claimed that the sterilization process killed a number of the organisms associated with food poisoning.

A sample was submitted for bacteriological examination and organisms found were so numerous that only one type could be identified. The manufacturing Company is outside the City and the matter is under investigation both here and in the area of that authority.

Complaints

The usual crop of complaints were received respecting foreign bodies in food, dirty milk bottles, moulds and mites and among the unusual ones was a report from a person who found a false bottom on a tin of salmon. It was secured to the original bottom of the tin by means of a piece of bitumastic material. The fish inside the tin was quite sound and fit for eating, and no action was taken. It was assumed that the tins or the contents had been examined in the factory and down-graded.

A complaint respecting the discovery of a piece of metal in cheese resulted in a warning letter from the Town Clerk to the Company who retailed it. The cheese was imported from New Zealand but the retailers were unable to trace the particular consignment.

Bitter taste giving rise to vomiting was alleged to have been due to the consumption of a home grown vegetable marrow.

The Public Analyst reported that Long Ashton Research Station, confirmed his opinion that bitterness in marrows and cucumbers, more prevalent in dry weather, is due to natural causes. It is non-toxic but it could render the vegetable unpalatable.

The "soapy" flavour of a fruit cake was due to the release of fatty acids in nut oil in the cake.

Doughnuts having an abnormal flavour were submitted for analysis. A pronounced salty taste was detected and was considered to be due to the faulty addition of bicarbonate of soda to the mix. Excess soda combined with acidity in the mouth, gave rise to the unpleasant flavour.

"Hairs" in potted mussels turned out to be a normal part of the anatomy, the gills with attached filaments.

A pig's molar tooth was found by a purchaser of a tin of meat manufactured by a reputable firm. Following correspondence with the Chief Public Health Inspector of the City concerned and consideration of all the facts, a warning letter was sent by the Town Clerk.

Legal Proceedings

<i>Offence</i>	<i>Result</i>
Cigarette in bread	Case dismissed. Doubt as to responsibility.
Milk adulterated with 5.9 per cent added water	Warning letter by Town Clerk.
Rat excreta in rice	Fine £5 with 2 guineas cost.
Nail in loaf	Fine £5 with 2 guineas costs.
Milk adulterated with added water	Fine £10 with 2 guineas costs.
Potatoes unfit for human consumption.	Fine £2.
Sale of poultry food without a "statutory statement" ..	Fine £1.
Milk adulterated with added water	Fine £10.
Milk deficient in fat	Fine £5 with £1 costs.
Milk deficient in fat	Case withdrawn.
Mouldy loaf	Fine £5 with 2 guineas costs.
Nail in cake	Fine £5.
Steak pies alleged to contain 50 per cent butter—no butter revealed	Fine £10.
Dirty bottle of milk	Case not proved.

*Milk**Chemical Analysis*

Some 1079 samples of milk were submitted to the Public Analyst. Of 137 deficient in fat, 68 were satisfactory when bulked with the remainder of the consignment. Forty-seven were deficient in non-fatty solids and 3 were deficient in fat and non-fatty solids.

Thirty-four samples contained added water. Fourteen repeat samples in these cases were satisfactory but legal proceedings were taken against 3 producers in respect of 16 adulterated milks. No proceedings were possible in respect of 4 watered samples because no contract with the Milk Marketing Board existed.

Biological Examination

None of the 464 samples submitted was infected with tubercle bacilli but 13 from 10 different producers contained the brucellosis organism. All of these were from milk consigned to processing dairies.

Reports on samples taken at the end of the year are not yet available.

Designated Milk

Three hundred and fifty-eight samples of pasteurised milk including 140 supplied to schools and 20 samples of sterilized milk were secured. Six failed the phosphatase test and none failed the methylene blue reduction test. This is a remarkably good record for the Bristol dairy industry when one remembers the long spell of hot weather.

Owing to atmospheric storage temperature exceeding 65°F. the methylene blue test could not be applied in respect of no less than 134 samples. Thirty-five of 180 samples of tuberculin tested milk failed the methylene blue test i.e. over 20 per cent. It may be pointed out that the retail sale of tuberculin tested milk is confined to the smaller dairymen or producer-retailers; the large concerns pasteurise all milk for retail sale.

Ice Cream

None of the 204 samples failed to comply with the compositional standard. Samples were graded as follows:—

Grade	1959	1958
1	115	116
2	54	37
3	16	10
4	15	7
Unclassified	4	18

Ice Lollies

There was a recurrence of unsatisfactory, though harmless, bacterial condition in samples of creme-lollies of one manufacturer and the maker's attention was drawn to the matter. It is intended to pursue this during the season.

Medicines and Drugs

Five hundred and ninety samples of assorted medicines or drugs were procured. The only adverse comments were in respect of castor oil, glycerine and sal volatile which were of old stock. Representations secured destruction of the remainder.

Whilst they may all neither be "medicines" nor "drugs", some attention has been given to the sampling of unusual commodities e.g., Egg and Lemon; Champagne, beer shampoos, surgical soap, diabetic foods,, slimming preparations, insect repellants, smelling salts, baby soothing powders, laxative chocolate and chewing gum, sickness tablets, sunburn preparations, sweeteners, chocolate with whisky filling, massage creams, medicated snuff, corn and wart preparations and commodities on sale at Health Food stores.

One might be inclined to doubt the accuracy of labels on small packets of shampoo alleged to contain egg and lemon, champagne or beer but the Public Analyst confirmed the presence of egg and lemon, and detectable amounts of alcohol respectively.

Pharmacy and Poisons

Thirty-three samples were procured during the year. A disinfectant label carried exaggerated claims for its efficacy and the word "Poison" was missing. It has now been withdrawn from sale. Another disinfectant was improperly labelled. The makers of a well known product were surprised to hear that the germicidal co-efficient claimed was inaccurate.

Over 600 visits were paid to "listed" sellers and to other shops for the purpose of discovering those selling formic acid preparations, formic acid being an addition to the Part 2 Poisons List.

Sampling at Corporation Establishments

In addition to the samples of milk taken at schools, a large number of foods from kitchen stores were submitted to the Public Analyst. In several cases insect infestation or deterioration from long storage had occurred and such foods were destroyed.

Fertilisers and Feeding Stuffs

Forty-seven formal and 89 informal samples of fertilisers and of animal feeding stuffs were secured during the year. Declared ingredients were outside the permissive limits of variation in 20 samples. In five cases no statutory statement was supplied with the sample and in one instance, following a warning letter, the offence was repeated and legal proceedings were taken.

Food Poisoning, Dysentery and Para-typhoid

Notifications of the occurrence of food poisoning, dysentery and para-typhoid, resulted in a considerable number of investigations being carried out. Details of this work are given in Section A of the Medical Officer of Health's Annual Report, under "The Prevalence and Control of Infectious Diseases."

Dairies and Milkshops, etc.

1958	<i>Registrations</i>								1959
	<i>Milk and Dairies Regulations, 1949</i>								
68	Dairies	..	..	..	..	..	..	..	62
612	Distributors	..	..	..	..	..	..	..	631
	<i>Milk (Special Designation) Regulations, 1949</i>								
11	Pasteurised: Dealers' (Pasteurised) Licences	..	..						11
396	„ Licences	..	..	..	..	..	..	..	429
18	„ Supplementary Licences							..	17
1	Sterilised: „ (Sterilisers) Licences	..	..						1
508	„ Licences	..	..	..	..	..	..	..	529
12	„ Supplementary Licences							..	13
40	Tuberculin „ Licences	..	..	..	..	..	..	..	45
7	Tested: „ Supplementary Licences							..	6
	<i>Food and Drugs Act, 1955</i>								
12	Manufacture, storage and sale of ice cream	..	..						11
1,339	Storage and sale of ice cream	..	..	..	..	..	..	..	1,394
233	Preparation of sausages or potted, pressed, pickled or preserved food	..	..	..	..	..	..	..	240
139	Fish frying premises	..	..	..	..	..	..	..	137
—	Butter factories	..	..	..	..	..	..	..	—
—	Wholesale dealers in margarine	..	..	..	..	..	..	..	—

Dairies and Milkshops, etc.

<i>Samples Taken</i>	<i>Samples not satisfactory</i>	<i>Chemical Analysis</i>					<i>Samples Taken</i>	<i>Samples not satisfactory</i>
1958							1959	
976	55	Milk	..	..	..	..	1,079	173
180	—	Ice Cream	..	..	..	..	182	—
2,185	10	Other foods	..	..	..	..	2,171	44
576	15	Medicines and drugs	..	..	..	..	595	16
31	1	Poisons	..	..	..	..	33	—
48	—	Rag flock	..	..	..	..	33	—
149	12	Fertilisers and feeding stuffs	..	..	..	..	136	6
124	9	Water (Baths)	..	..	..	..	114	1
63	4	Water (Other)	..	..	..	..	57	2
105	33	Miscellaneous	..	..	..	..	125	43

Bacteriological examination:—

689	11	Milk T.B. exam:				464	13
			City	..	..
			Somerset	..	..
			Gloucestershire	..	..
			Other Counties				
217	1	Milk, pasteurised	..	..	..	218	6
27	—	Milk, sterilised	..	..	..	20	—
145	—	Milk, schools	..	..	..	140	—
191	28	Milk, T.T.	..	..	..	180	35
188	6	Ice Cream	..	..	..	204	6
66	1	Plant tests	..	..	..	96	—
505	70	Churn and bottle tests	..	..	..	447	84
60	12	Shellfish	..	..	..	59	14
64	4	Water	..	..	..	72	3
173	57	Miscellaneous samples	..	..	..	173	22

1958

Visits (Not Sampling)

1959

300	Pharmacy and poisons	..	..	..	..	..	684
177	Dairies	..	..	..	..	..	220
271	Ice Cream shops	..	..	..	..	..	297
417	Other food premises	..	..	..	..	..	399
792	Butchers shops	..	..	..	..	..	760
10	Infectious diseases (except food poisoning)	..	..	..	..	..	44
785	Dysentery	..	..	..	..	..	317
208	Food poisoning	..	..	..	..	..	223
71	Noxious weeds	..	..	..	..	..	66
6	Rag flock	..	..	..	..	..	2
596	Other Visits	..	..	..	..	..	674

Notices

44	Informal notices served	..	..	..	..	..	48
68	Informal notices complied with	..	..	..	..	..	45
—	Statutory notices served	..	..	..	..	..	—
—	Statutory notices complied with	..	..	..	..	..	—

Remedial Action

21	Premises altered and repaired	..	..	..	..	..	20
58	Premises cleansed and decorated	..	..	..	..	..	33
100	Other defects remedied (premises)	..	..	..	..	..	61
79	Hot water handwashing facilities provided	..	..	..	..	..	52
6	Heating provided	..	..	..	..	..	10
—	Drainage—Drains tested	..	..	..	..	..	—
—	Drains repaired	..	..	..	..	..	1
1	Choked drains repaired	..	..	..	..	..	1
1	Water closets—Flushing appliances provided	..	..	..	..	..	1
2	New pans provided	..	..	..	..	..	—
26	Other repairs	..	..	..	..	..	22
29	Lighting provided	..	..	..	..	..	16
57	Other nuisances abated	..	..	..	..	..	37

Other Registrations, Licences, etc.

1958		1959
	<i>The Rag Flock and Other Filling Materials Act, 1951</i>	
3	Licences to store rag flock	3
31	Premises registered to use filling material	30
	<i>Pet Animals Act, 1951</i>	
29	Licences to keep a pet shop	33
	<i>Pharmacy and Poisons Act, 1933</i>	
467	Listed sellers of Part II poisons	466
	<i>Slaughter of Animals Act, 1933–1954</i>	
65	Licensed slaughtermen	72
	<i>Food and Drugs Act, 1955—Section 62</i>	
4	Licensed slaughterhouses (Bacon Factories) ..	4
1	Licensed slaughterhouse	1
2	Licensed knackers' yards	2
	<i>Public Health Act, 1936</i>	
	Offensive trade—annual consent—	
6	Premises	6
11	Trades	12

Statistics

Samples submitted to the Public Analyst 1st January to 31st December, 1959:

Sampled under the <i>Food and Drugs Act</i> :—	1958	1959
Dry goods, spirits and drugs	2,941	2,948
Milk	976	1,079
Total	3,917	4,027
Water, swimming baths	124	114
Water, other	63	57
Filling materials	48	33
Fertilisers and feeding stuffs	149	136
Poisons—Part II	31	33
Miscellaneous	105	125
Total	520	498
GRAND TOTAL	4,437	4,525

Samples submitted to the Bacteriological Laboratory 1st January to 31st December, 1959

Milk:—					1958	1959
Tubercle examination	..	..	..	..	689	464
Tuberculin tested	..	..	..	..	191	180
Pasteurised	..	..	..	..	217	218
Pasteurised (schools)	..	..	..	..	145	140
Sterilised	..	..	..	..	27	20
Ice Cream	..	..	..	..	188	204
Water	..	..	..	..	64	72
Plant tests	..	..	..	..	66	96
Churn and bottle rinses	..	..	..	..	505	447
Shellfish	..	..	..	..	60	59
Miscellaneous	..	..	..	..	173	173
TOTAL	..	..	..	..	2,325	2,073

Adverse reports were received from the Bacteriological Laboratory in respect of the following samples:

Milk:—					1958	1959
Tuberculous*	..	..	..	..	16	13
T.T.	..	..	..	..	29	35
Processed	..	..	..	..	1	6
Ice Cream—Grades 3 and 4	..	..	..	..	17	31
Plant tests	..	..	..	..	1	—
Churn and bottle rinses	..	..	..	..	70	84
Shellfish	..	..	..	..	12	14
Water:—						
Baths	..	..	..	..	—	—
Other	..	..	..	..	4	3

* Includes *B. Abortus*

Appropriate action was taken in all of the above cases.

Food Hygiene Regulations

People everywhere, both general public and traders, are becoming much more hygiene conscious in connection with food supplies. There is still much to be done, however before we can feel satisfied with the situation as a whole.

The larger stores are setting a good standard in their special food departments with pre-packed foods, refrigerated display cabinets and special training for their assistants. There is no doubt that these examples will educate the general public to expect higher standards everywhere and the trader who fails to reach a comparative standard in hygiene may find his business will suffer.

Six prosecutions were taken during the year under the Food Hygiene Regulations, all of them for smoking whilst handling food. One defendant, a bread roundsman, was prosecuted twice, having been seen repeating the offence a short time after he had been fined for smoking whilst delivering unwrapped bread!

Greater attention is now being paid to the enforcement of the Food Hygiene Regulations in the case of mobile shops and street traders—a field in which there are still many problems to be solved.

PUBLIC SWIMMING BATHS

There are 12 public swimming baths in the City. Of this number, 11 are owned by the Corporation and are under the control of the Baths Committee. Ten of the baths are of the closed type and one is an open air swimming pool. Two of the closed baths and the open air pool are closed for bathing purposes from October to March of each year.

The water source for all baths is mains supply. In the case of the three baths mentioned above, pools are emptied at the end of the swimming season and in all other cases constant topping-up, to compensate for normal water loss in pools, ensures adequate water changes. Continuous treatment of water by rapid pressure filters, aeration and break-point chlorination is carried out at each Corporation baths. Water circulation in closed baths varied from $2\frac{1}{2}$ to 4 hours and every 5 hours in the open bath. Thermal storage or steam injection methods are employed in all closed baths for water heating and soda ash treatment ensures suitable alkalinity of the water in all cases. Field tests are taken at intervals throughout each day by Baths Superintendents to check on the residual chlorine figure.

Public Health Inspectors take monthly chemical samples of the waters of all Corporation baths. In the event of any samples being unsatisfactory, the Chief Baths Superintendent and Engineer is informed and corrective measures are taken. No bacteriological sampling is carried out.

The non-Corporation public bath is in the form of a lake, varying in depth from 20 to 40 feet and having an estimated water capacity of 31,000,000 gallons. The lake, which was formerly a clay pit, is fed by a number of below-water-level springs which enter the pool at varying depths. Water change is continuous and is a natural process. A certain amount of fishing is allowed from small promontories in the lake and, particularly during the off-swimming season, the lake is used by an aqua diving club.

The water in the lake is clean and clear in appearance and since treatment is impracticable for such a body of water, natural purification is relied upon.

There is a small concrete pool adjoining the lake which is set aside for children. The water depth is 2 feet. Water is pumped from the lake and hand chlorination is carried out. The water is changed several times a week and bacteriological and chemical samples are taken from time to time to check the quality of the water.

ATMOSPHERIC POLLUTION

In reviewing progress made during the year it can be said that the overall picture of anti-pollution work was quite good. The highlight of our efforts in this connection was the confirmation of the Bristol No. 1 Smoke Control Area, which came into operation on 1st October. Fifty-one cases of smoke complaint were investigated and these were mainly due to nuisances from industrial chimneys or garden bonfires.

Smoke Control Areas

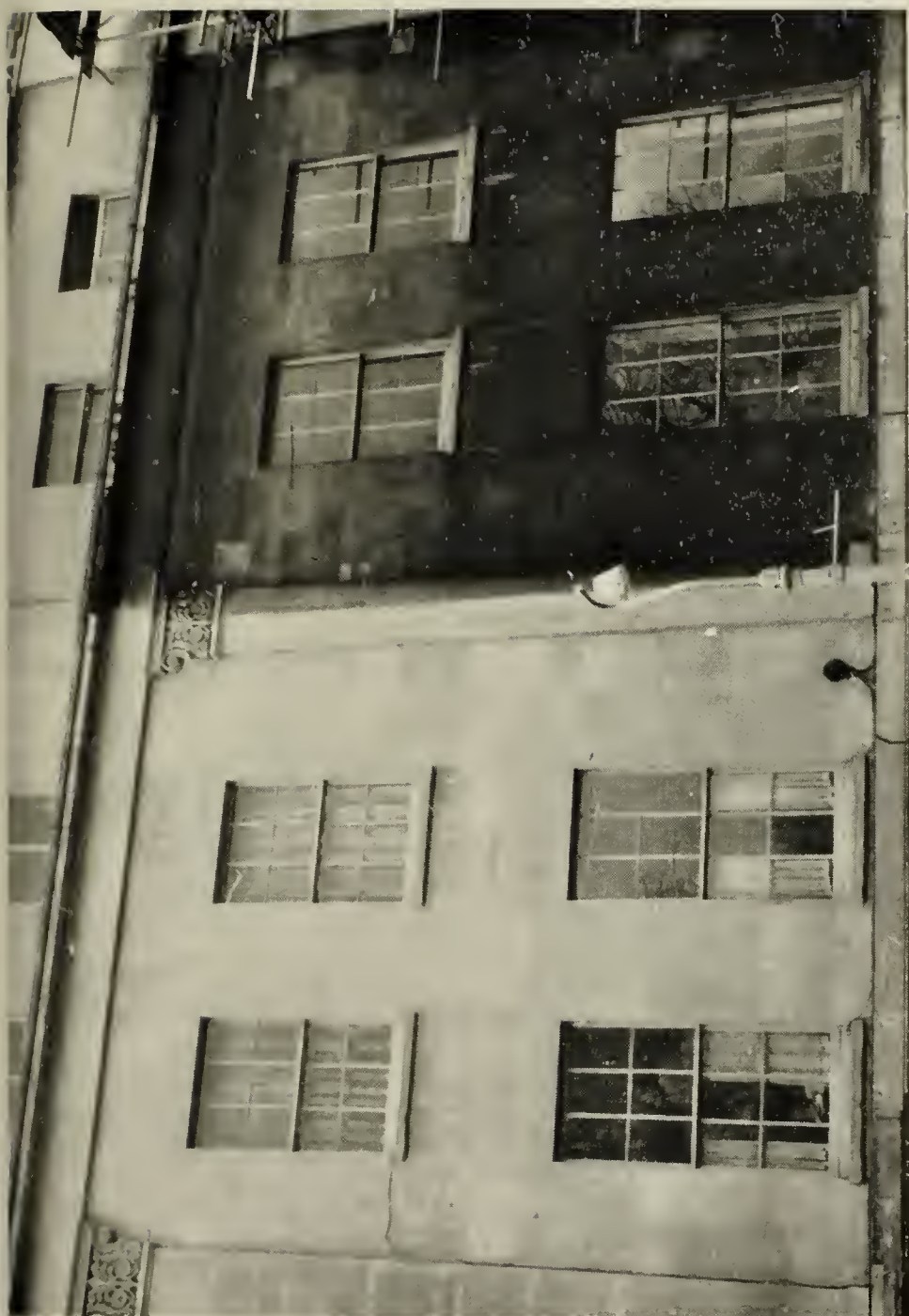
With the confirmation of the Bristol No. 1 Smoke Control Area, the middle six months of the year were spent in dealing with the applications of interested persons for Local Authority approval of proposed adaptations and replacements of domestic fireplaces in the area. Although it had been emphasised during discussions with occupiers and by distributed pamphlet, that grants would be based only on "reasonable and necessary adaptation", a few applicants were upset that the full grant would not be paid on their more expensive schemes.

These circumstances may justify in the future, the service of an intimation notice, indicating in writing what is considered a reasonable and necessary adaptation. There had been no objections to the establishment of the area, but a fortnight after the confirmation date, a letter was received by the Public Health Department from an occupier of a flat sited in a street which forms a boundary of the area. She stated she was "willing to co-operate had the other side of the street been included in the area." After lengthy discussions with an officer, she agreed that the boundary had to be drawn somewhere! Such happenings help in the build-up of experience for future Smoke Control Area establishment, and, as in all other aspects of Public Health work, patience and tolerance in these circumstances pay valuable dividends.

During the year the Minister of Housing and Local Government asked Local Authorities to inform him of their intentions regarding Smoke Control Areas over the ensuing 5 years and the year they hoped to complete smoke control in their districts. As a consequence, the Medical Officer of Health arranged a meeting in order to obtain the full opinion of other Chief Officers and the effect of smoke control on the workings and plans of other Departments. A suggested 5 year plan was put to the officers and favourably received although there was comment upon the probable increase in the amount of refuse likely to be handled by the Corporation. Finally, the plan was put to the Health Committee, which agreed in principle with the scheme.

Since these meetings more areas have been surveyed in order to submit preliminary details to the Minister prior to collating detailed information on the areas. Public interest in smoke control is keen and talks on the subject have been given to various groups, mainly housewives. Considerable interest was shown by the Vicar of a famous Bristol Church. He asked the Medical Officer of Health about the future of Smoke Control plans in the City because consideration was being given to the cleaning of the Church stonework. He wondered whether or not his Church would be included in an area in the near future, and it was pointed out that, although his Church would be included within an area in the next phase, pollution from outside the area would still drift towards the Church. This comment was not given as discouragement, but to prevent undue hopes of the lasting effects of the cleaning. The full benefits of smoke control will not be evident until the whole area on the prevailing wind side of the Church is controlled.

Towards the end of the year interest in the opposite sense arose. The local coal merchants' Association inserted in the local newspaper an advertisement that called for the continued use of open coal fires. The advertisement included cullings from various sources attempting to minimise the effects of domestic smoke. This advertisement was answered by the National Society for Clean Air and by a retired scientist who had been an assessor to the Beaver Committee. In addition nationally the Coal Utilisation Council was telling the public that "there's nothing so cosy as a coal-fire". Whilst the action of the Coal Utilisation Council and the others is quite understandable, it seems anomalous that although scientific evidence and opinion supports the measures legalised by the *Clean Air Act*, a responsible body would be doing its utmost to counter measures of such public health importance. The coal industry's fears were allayed somewhat by the making of the "Smoke Control Areas (Exempted Fireplaces) Order, 1957, "which exempts amongst other things, fireplaces fitted with mechanical stokers, from the provisions of Smoke Control Orders. This principle had already been accepted by the Bristol Corporation in the No. 1 Smoke Control Order. This exemption allows the burning of bituminous coal by mechanical stokers, which, if properly fitted, maintained and operated, reduce smoke emission to a minimum.



A STUDY IN BLACK AND WHITE. EFFECT OF SMOKE ON BUILDINGS AND CONSEQUENT EXPENSE OF CLEANING.



SMOKE HAZE — A PART OF BRISTOL NOT YET A SMOKE CONTROL AREA.



CLEAR SKIES OVER BRISTOL'S FIRST SMOKE CONTROL AREA.



AN EXAMPLE OF THE CORROSIVE EFFECT OF AIR POLLUTION ON A BUILDING IN BRISTOL.

New Chimneys

During the year, plans submitted to the Corporation in accordance with building byelaw requirements, showed that 23 new chimneys were to be erected. Of these 23 proposed chimneys, 16 were considered to be of suitable height without necessity for comment and 3 were considered to be of satisfactory height only so long as certain fuels were used. The proposed heights of 3 chimneys were considered insufficient and after discussion with the interested parties, satisfactory heights were agreed upon. In the case of the remaining chimney, records show that its erection had been approved some time before the Clean Air Act came into force. Discussions with the architect upon the height of the chimney, which in relation to nearby buildings was too low, drew no response. This case will probably turn out to be one of delayed action.

Notification and Prior Approval of New Furnaces

The installation of 33 new furnaces were notified to the Public Health Department during 1959. Of these 30 were oil-fired, one gas-fired, another was electric and the remaining furnace was an incinerator for the burning of tea-chests.

Two requests for approval in accordance with Section 3 (2) *Clean Air Act, 1956*, were submitted to the Public Health Department. The Health Committee on the recommendations of their officers, approved these two, both oil-fired, plants. In connection with prior approval of furnaces, the Public Health Department was pleased to help and advise the officer of a Rural District Council on the proposed installation of an incinerator for which prior approval was being asked. The shortcomings of the proposed plant and nuisances likely to arise from its operation were pointed out. The rural inspector had further discussions with the installers as a result of this advice, and subsequently other more satisfactory arrangements were made by the firm. The Bristol Public Health Department gains wide experience which is not always accumulated by smaller authorities. Occasions arise when these latter authorities are anxious for guidance and are appreciative when it is given.

Smoke and Soot Emissions

As mentioned earlier in this section of the report, 51 cases of undue smoke emission were investigated. Of these, 25 concerned the burning of trade refuse or garden rubbish; 23 referred to emissions from industrial or commercial chimneys. There were two cases of domestic smoke emission in the No. 1 Smoke Control Area after the operative date and these were due to "using up" coal still on hand. Warnings were given and there was no repetition of the emissions. The remaining complaint concerned an alkali works process and after initial investigation, this was passed on to the District Alkali Inspector.

The alleged nuisances from garden bonfires were, as can be expected, caused mainly during the autumn, and only single instances in each case, there being no continuous burning. The public on the whole seem averse to composting, probably because of lack of garden space, or is it because most men retain a boyish desire to make fires? The burning of trade refuse on bonfires is a different matter and can occur at all times of the year. However, none of the firms concerned seemed to make a habit of this refuse burning, and after discussions with the managements, suitable arrangements were made for proper disposal.

The sources of the smoke emissions from industrial chimneys were divided between 9 oil-fired plants, 12 coal-fired, and 2 wood-waste furnaces. In the case of oil-firing plants the smoke emissions were due to one of the following reasons; mal-adjustment of fuel/air ratio; too large a burner in relation to

the combustion space; flame impingement on the furnace wall causing carbon build-up with consequent aggravation of the impingement. In all cases immediate attention was given to the plant, following a visit by the public health inspector. In one case a large oil-fired boiler plant emitted dark and black smoke for a long period. On investigation it was found that N.I.F.E.S. engineer was in attendance and testing the boilers to ascertain their capacity. As a result the National Industrial Fuel Efficiency Service was asked for and readily gave its agreement to prior notification of similar tests likely to cause smoke emission.

The causes of undue smoke from coal fired furnaces were:— (a) breakdown of mechanical stoker, or (b) unsuitable fuel either for hand-firing or in two cases for mechanical stokers.

The two cases of wood burning were found to be due to the firing of wood shavings or sawdust from certain tropical woods and the wood-waste incinerators seemed incapable of providing the necessary combustion conditions. Other sources of disposal will have to be found for this type of wood-waste.

A problem that will probably increase in the future is that of oil-smut emission. This type of emission is due to several factors—high efficiency heat transference; metal stacks; cold weather; and high sulphur content oil. This can be very troublesome, especially if houses surround the boilerhouse. The smuts falling on washing can cause staining of the clothing apart from the extra work of re-washing. The answer to the problem is to prevent the cooling of the flue gases below dew-point. This usually means that metal stacks need to be insulated and installers of new metal chimneys are reminded of this smut problem, so that measures can be taken on first erection.

The problem of trade refuse disposal will need increased attention as smoke control spreads. Where controlled tipping is not capable of coping with this type of refuse, some form of incineration seems to be the only answer, but in the past the development of furnaces to do this job on a small scale has been neglected. A large number of factories burn their refuse in their boiler fires or on a simple type of furnace with no proper means of air and burning control. One or two firms in the City have faced up to the problem and equipped their factories with proper incinerators and use the heat produced to heat water or raise steam. To make this approach to refuse disposal worth while, the firms concerned must produce sufficient combustible refuse and such firms are in the minority.

A troublesome smoke nuisance arose during the summer in connection with a refuse tip which is privately owned, and sited partly in Bristol and partly in the district of an adjoining Authority. The tip, either through the efforts of children or by spontaneous combustion, caught fire, provoking bitter but justifiable complaint from occupiers of nearby residences. The advice of the Bristol Transport and Cleansing Department was sought, and when their suggestions were taken up the fires were successfully eliminated.

Paint drying Stove

Industrial progress brings great achievements but also can be attended by problems, often of a public health character. A complaint that originated in 1958 concerned the smell from the stove drying of newly painted sheet metal used in the making of steel drums. The sheets after painting are passed through a gas fired drier and the vapourised solvent was exhausted to the atmosphere. Amongst the paints used was an epoxyl resinous type and the solvent has an unpleasant smell. As a result of discussions with the Public Health Department, a wet scrubbing plant was installed in the path of the exhausted vapours and there has been an appreciable reduction in the odour emission. In addition to

odour, there arose the emission of undue smoke. The steel sheets are painted by a roller process and at the end of each run the rollers are washed with solvent. No use can be found for this solvent/pigment and disposal is difficult. It was decided to burn it and it so happened that the firm had available a large disused brick stack still connected to a horizontal flue. A hole was broken into the top of the horizontal flue and the solvent dripped and ignited on the the inside bottom of the flue. Even with a small droplet feed smoke was made and if care was not taken, heavy black smoke ensued. The firm have agreed to tackle the matter scientifically, but as an interim measure tried a method of burning suggested by the public health inspector. Many ex-servicemen will remember the oil and water drip feed stoves used during the last war. The inspector suggested that in addition to the solvent feed, a water feed be provided so that a mixture of solvent and water was fed into the ignition zone. This resulted in elimination of the smoke and increased rate of burning. It means, however, that because the apparatus is an improvisation a pensioner has to be employed to maintain a proper flow of both liquids.

Alkali Works Process

A lead smelting works was the subject of complaint in that during the tapping of the furnace, dense fumes were produced and though measures were taken to collect it and conduct it to scrubbers and thence to a tall chimney, a lot of fumes escaped. This complaint, after initial investigation by the Public Health Department, was passed on to the District Alkali Inspector, who eventually informed the Department that more effective measures were to be taken by the firm.

New Legislation

The Smoke Control Areas (Exempted Fireplaces) Order, 1959 became operative on 17th July, 1959 and concerns the use of certain fireplaces in Smoke Control Areas.

Fireplaces constructed on or after 31st December, 1956 and equipped with mechanical stokers are exempted from the provisions laid down by a Smoke Control Order. The effect of this exemption is that bituminous coal can be burned in such fireplaces in Smoke Control Areas. The mechanical stokers, of course, must be properly installed, maintained and operated and burn a suitable fuel.

Other fireplaces exempted from the requirements of Smoke Control Orders are: the fireplace known as the Solid Fuel Ductair Unit; and the fireplace known as the Fulgora Slow Combustion Stove. The Ductair Unit is designed to circulate air, warmed by a furnace, around a building, and the Fulgora Stove to burn sawdust smokelessly.

These three exempted fireplaces are still subject to the requirements of Section 1. *Clean Air Act, 1956* regarding smoke emission.

Smoke Inspectors' Course

Another course for the Smoke Inspectors' Diploma has been arranged in conjunction with the College of Technology and will continue on to the late Spring of 1960.

GENERAL ENVIRONMENTAL HEALTH WORK

School Meals Service

The year has seen the continuance of a close relationship with the School Meals Service of the Education Department. It is right that attention should be given to this service since it is a very large catering organisation. Whether the food is prepared in central kitchens, dual purpose kitchens, school kitchens or served from containers in school canteens, the need for good hygiene is of paramount importance. Frequent discussions with the School Meals Officer on matters relating to kitchens, and visits with officers of the School Meals Staff do much to resolve problems which must arise in a catering organisation of this size.

In the previous Annual Report an account of a preliminary survey of school kitchens was recorded, and during the year under review the report was discussed at a meeting attended by the Medical Officer of Health, Senior Medical Officer, School Health Service, Deputy Chief Education Officer, School Meals Officer and the Chief Public Health Inspector. The report was well received and the Chief Public Health Inspector was asked to continue the inspection of kitchens and canteens throughout the School Meals Service. In addition, a concurrent inspection of the School Milk Service was requested. At an appropriate stage the Chief Public Health Inspector will be submitting a report to the Medical Officer of Health from which, if considered desirable, a code of practice can be drawn up.

In order to remind the food handling staff of the importance of personal hygiene and the hygiene of food handling, 10 lecture/demonstrations were arranged and 274 of the canteen and kitchen staff attended.

The presentation of talks and demonstrations to the food handlers has been carefully designed to lay stress on the commonsense, common decency approach to the hygienic preparation and handling of food, and to encourage a proper sense of responsibility in every aspect of the catering service. Demonstration of some of the unhygienic habits encountered in the food service, generally, is received with amusement, but produces, too, a "conscience". When this has been achieved the battle is largely won.

Other facets of the work performed for the School Meals Service are mentioned elsewhere in the report. It is important that the health of the school child should be safe-guarded in every way, and it is pleasing to record that a useful contribution is being made towards this objective by the public health inspectors.

Noise Nuisances

Noise and its effect on health was discussed in the last annual report. The abatement of this type of nuisance continues to exercise the minds of public health inspectors locally and nationally. Regard has to be had to many factors including planning control, the effect on production in industry, the potential impairment of health and so on. By far the major difficulty, in the absence of statutory standards, is the judgement of noise levels in order to determine at what point they become excessive or unreasonable.

The problem of noise has been given increased publicity in recent months by the Noise Abatement Society and local authorities have been invited to take part in its deliberations and investigations in order to reduce noise in many spheres of activity. Bristol Corporation has recently resolved to become a member of the Society. The force of public opinion can undoubtedly achieve a great deal in the overall reduction of noise and it is hoped that such pressure,

combined with the efforts of Health Departments, will eventually result in the attainment of more peaceful environments.

An account of some of the noise complaints dealt with during the year and the action taken is recorded hereunder.

Boilerhouses of Public Authority

The complaint about the operation of a large new boilerhouse, mentioned in the previous year's report, continued into the early part of 1959. The volume of noise has been minimised and further arrangements are being made to reduce cause for complaint.

Generation of Electricity by Aircraft Jet Engine

During the year a plan of a proposed plant for the generation of electricity was submitted to the Corporation, and this was passed to the Public Health Department for observations. The plan showed that the prime mover for the generator was to be a well-known jet engine. Although it was also indicated that noise insulation measures were to be incorporated in the building, concern was felt about the use of a jet engine at ground level, especially as the site of the plant was relatively close to some new blocks of flats. The Deputy Planning Officer and a Senior District Inspector visited the works of the engine manufacturers and aurally "inspected" similar engines under test. This visit did not allay the doubts. However, the suspected noise problem did not arise, since an alternative site on Dartmoor was available and it was here eventually that the plant was erected.

Oxygen Works

The matter of noise from an oxygen works was the subject of a petition from householders in the vicinity of the works. Pressure of turn-over necessitated the loading of cylinders onto lorries during the night and the clanging caused by the cylinder handling could be heard a long way from the works. The covering of the metal cylinders with a protective and non-noise producing substance seems to be precluded by the requirements laid down in the Regulations dealing with the conveyance of pressurised gases. Unfortunately, the lay-out of the loading bays prevents the entry doors from being closed when the lorries are in position for loading.

Since nothing can be done to alter the cylinders, it is the building that will need to be modified. The firm, therefore, are now preparing plans for the modification of the loading bays, so that loading of cylinders can be carried out in an enclosed area, and this with a reduction of night work should minimise noise from this source.

Other Noise Nuisances

Other noise nuisances investigated during the year included a large boilerhouse built on the open plan and eventually necessitated the erection of baffle walls, restriction of some operations, to daylight hours and the modification of a very noisy deaerator. Another case entailed night work at a car radiator repair works. The hammering of sheet metal was the source of the noise and this type of work ceased at night on representation to the management by the Public Health Department.

Homes for the Aged

The large Welfare Services Home for the aged was the subject of a detailed inspection and recommendation in 1955. Regular visits have been made over

the years either of a routine character, or in response to requests by the Welfare Services Officer for advice and assistance in relation to specific problems. This year however, a further detailed inspection of the whole Home was carried out, which apart from assessing the standards of day to day maintenance and the hygiene of the kitchens and serveries, afforded an opportunity of recording the improvements which have been carried out over the last four years.

The modernisation of the Home is being carried out on a progressive basis. Each part of the Home is being dealt with in turn, and the general policy is to effect complete improvement of each block, rather than to carry out partial improvements over a series of blocks. The improvements have been designed to break down the large sitting room and bedrooms into smaller units. This has been done by full or half-partitioning. Additional sanitary accommodation and washing facilities, in or adjoining bedrooms, has been provided for the convenience of the aged, new floors have been laid, ventilation improved by mechanical means where necessary, and fluorescent strip lighting installed. All bedrooms have been redecorated, and well furnished, and serveries have been brought up to standard which allows food hygiene to be maintained at a satisfactory level.

In a large Home such as this, there is the ever present problem of staff changes. Since nursing staff, orderlies, kitchen and canteen personnel, are all concerned with either the preparation, handling or service of food, five lecture-demonstrations were given during the year in order that they might be reminded of their responsibilities in relation to food hygiene.

A special sub-committee of the Welfare Services Committee met during the latter part of the year to discuss the City Engineer's report on the heating installation of the Home. This was based on an investigation and report by the National Industrial Fuel Efficiency Service and the Chief Public Health Inspector was asked to attend the sub-committee in order to explain the effects of the Clean Air Act and Smoke Control Orders, and to advise on the three alternatives for firing the boilers.

Insect Pests

The insect world is always an interesting one but at the same time necessitates world-wide research and control in order that man and commodities may be protected from it. The presence of insects can have three possible effects; they can destroy food, endanger health, or merely be a source of annoyance. Communication between the four corners of the world by land, sea and air is resulting in the migration of insect pests to a stage where they are becoming as cosmopolitan as the human race.

This effect is becoming increasingly evident since the number of species of insect pests have reached the stage where identification is frequently necessary to determine their habits, life-history, country of origin, whether they are harmful or harmless in relation to man or his food, and the most suitable control measures which must be adopted by way of selective disinfestants, in order that infestations may be effectively put down.

The number of requests made by the general public for the identification of insect pests found in all types of premises is indicative of the concern which people have today for the control of the insects. It is obvious that the many instructional programmes on insects, brought to the homes of listeners and viewers, through the media of radio and television are producing a public awareness of the fact that insects can be a potential danger to health, and as such are not to be ignored or "dismissed" by the swat of a newspaper or the weight of a heel.

We are fortunate in being able to call upon the Public Analyst or the Long Ashton Research Station, when identification of an insect is necessary and full use is made of these services.

A few notes on some of the infestations which the staff was requested to deal with during the year may be of interest.

The occupier of a private house expressed concern over the discovery of some queer looking insects which were inhabiting the roof space. The official description of the insects was that they were $\frac{1}{5}$ " long, the legs hairy and almost transparent were fitted with claws, and the wings which were short and tapering made the insect incapable of flight. Truly an insect vampire! They were identified as Swift Louse flies, parasitic on birds, particularly swifts, swallows and martins, and had undoubtedly been brought to this country from Africa by such birds.

A steam-ship arriving at Avonmouth from West Africa carried a varied cargo, part of which included bundles of hardwood for the furniture trade. The bundles when opened were found to be infested with insects resembling the common furniture beetle. Since the hardwoods were to be stocked in a factory having thousands of pounds worth of valuable timber, early identification was requested. In a matter of hours the insects were identified as Red Rust Flour and Red Rust Grain beetles which had got into the bundles from an adjoining cargo of cotton seed and cocoa beans, much to the relief of the furniture manufacturer!

A complaint was received from an owner-occupier of minute holes appearing in the covering material of two modern divan type beds. Whilst careful inspection of the packing material failed to indicate any infestation, a number of insects were found in an "Indian" carpet. These were found to be Australian carpet beetles which are known to attack cloth.

The occupier of a grocery store found a type of beetle on shelves stocked with packeted foods. Specimens obtained were later identified as larder or bacon beetles. They are insects frequently reported as doing damage amongst goods of various kinds including all types of cereals, hams and bacon.

A house occupied by an old-age pensioner was visited at the request of the owner in order to determine the structural condition of the premises. Disrepair and lack of cleanliness were found, and an inspection of the first floor front bedroom revealed a closet containing a waistcoat from which all the wool content had been removed by moth larvae. The blankets and the bed were similarly infested. Apart from the moth another kind of larvae type infestation was apparent and at first it was thought to be human thread worm. Specimens submitted were described as being 17 millimetres long, thin and worm like and pale in colour. They were divided into 20 well defined segments, had a brown head and the hind end bore a pair of small thin protuberances. They were identified as fly larvae probably of the stiletto fly. These favour humid conditions have been found in rotting wood, leaf mould and fungi. The stiletto fly is said to be predatory and had undoubtedly been preying on moth larvae and pupae in the bedding. They are harmless to humans.

Insects that had found their way into a roof space were suspected by the owner-occupier of being wood beetles. The roof structure had been recently altered and timber extensively used in the conversion of part of the roof space into a studio. The beetles were identified as the common ground variety, neither food infestors nor harmful to man.

A provision merchant while sorting and packing some dried fruit discovered maggots in the food. The merchant formed the opinion that the food had been infested at the importers premises and asked the Chief Public Health Inspector to investigate. The maggots were the larvae of the Mediterranean flour moth

which infests cereals, dried fruits, chocolate and spices. The life-cycle of this insect is almost four months even under suitable conditions, so that infestation of the dried fruit is most likely to have occurred in the country of origin.

It is pleasing to note the concern and interest demonstrated by all sections of the public and whether insect pests are found to be harmful or harmless, of public health importance or otherwise, it is clear that requests for identification and information should receive proper attention in order that appropriate disinfection can be carried out or to allay fears and in all circumstances to encourage reports of such occurrences.

All infestations were successfully treated and no recurrences were notified.

Gas Escapes

A number of deaths from accidental coal-gas poisoning have occurred in many parts of the country and have been given prominence in the press. As in other accident spheres, for example home accidents and road accidents, much can be done by forethought and care to lessen fatalities from such causes.

In order that a quick and organised method of procedure could be put into practice in cases where there is a doubt as to the source and cause of odours which give rise to reports of escapes of coal-gas, the Chief Public Health Inspector met representatives of the South-Western Gas Board and discussed the ways in which such complaints could be expeditiously investigated.

Reports of alleged escapes of town gas are received either at the office of the Gas Board or at the Chief Public Health Inspector's office. It is necessary therefore, that an immediate means of communication should be available so that when required each can notify the other of a complaint and be able, at short notice, to contact specific officers in either office. Whenever necessary, joint investigations take place, often in conjunction with the City Engineer's Department.

The fullest co-operation is given by the South-Western Gas Board which welcomed the opportunity of close liaison and co-operation in order that reports of coal-gas escapes can receive the highest priority and attention.

During the year twelve incidents were reported to the Chief Public Health Inspector's office and twelve to the South Western Gas Board. Nine out of the twenty-four reported cases were positive and remedial action was taken forthwith. In all cases appropriate investigations were pursued in order that the nature and sources of the offending odours could be determined.

Disposal of Surplus Chemicals

The variety of preventive measures needed to safeguard health, calls for versatility on the part of the Public Health Inspectorate. On one occasion during the year, a request was received from a Company of Manufacturing Chemists asking for a visit by a representative of the Public Health Department's staff, in order that they may be advised on the safest methods for the disposal of a large quantity of surplus chemicals.

A detailed list of the materials for disposal was requested and this showed that 600 items were involved. These included ointments, chemicals, dangerous drugs and poisons. In view of the obvious dangers attached to improper disposal of many of the items, the City Analyst was consulted and he agreed that the whole consignment should be accepted and that each item should be analysed to check against its description; thereafter appropriate disposal methods should be employed.

Before the surplus chemicals were accepted, the Town Clerk's Department drew up a form of receipt for the City Analyst and an agreement for signature

by the Manufacturing Chemists in which they agreed to abandon all claim on the goods and indemnified the Corporation against damages under certain circumstances.

The chemicals are now being gradually disposed of under the guidance of the City Analyst.

Health Education

Public Health Inspectors have once again taken an active part in the health education work of the Department. An account of this aspect of the Environmental Health Service can be found in the Health Education section of the Medical Officer of Health's Annual Report.

Technical Training

The City and County of Bristol with its University, Colleges of Technology and Commerce, Teachers Training Colleges and Further Education facilities is looked upon by Local Authorities over wide areas, as a good centre of training for courses concerned with the Environmental Health Services. The availability of technical staff with specialised knowledge of all aspects of Environmental Health completes the demand for the arrangement of courses in the various teaching centres provided by the Education Committee.

Much time and thought has to be given to the arrangement of lectures and practical visits programmes. This was realised many years ago and culminated in 1951 in the appointment of a Senior Inspector whose duties include that of Technical Training Officer.

The four main courses affecting Public Health Inspectors were Public Health Inspectors' 1st year, Public Health Inspectors' 2nd year, Meat and Other Foods, and Smoke Inspectors. The success of these courses is due to the high level of teaching by a panel consisting of four lecturers of the Veterinary School, Bristol University, the Director of the Public Health Laboratory, the City Analyst, the Deputy Town Clerk, the Deputy Medical Officer of Health and an assistant Medical Officer of Health, the Medical Statistician, a Mechanical Engineer, four lecturers from the staff of the College of Technology and nine Public Health Inspectors.

The students attending the courses come from Gloucestershire, Wiltshire, Somerset, Devon and South Wales and Monmouthshire. The consistent attendance throughout is indicative of the regard which students have for the various courses. As an example of the successes achieved, it is worthy of mention that at a recent National examination for Meat and Other Foods of the Royal Society of Health, 50 per cent of the successful candidates were students who had recently completed their training on the Bristol course.

Other courses which were arranged or on which the Public Health Inspector's staff were invited to lecture included the Institute of Housing, Matron House-keepers, Pre-Nursing, School of Nursing and four Food Handling Courses.

A considerable amount of semi-technical training is also given throughout the year and this is included in the report under the heading of Health Education.

Trainee Public Health Inspectors

The Trainee Scheme which has now been in operation since August 1955, continues to serve the two basic purposes for which it was designed:—

- (a) To prepare trainees for the qualifying examination of the Public Health Inspectors' Board.
- (b) To provide multi-purpose assistance to all sections of the Public Health Inspector's office.

Since the inception of the scheme nine trainees have been appointed, four of whom now hold the statutory qualification. Three have already been

appointed to the Health Department staff and one takes up his appointment in January, 1960. One of the four has also been successful in the Meat and Other Foods Inspectors' Examination. Three of the remainder will be sitting the qualifying examination in 1960, and two others are on the 1st year of the Ordinary National Certificate in Building Course. A further trainee appointment has been advertised and the post will be filled in the new year.

All trainees take up their appointment directly or shortly after leaving school, so that at the conclusion of their four years study, they are able to sit for the qualifying examination as soon as they have attained the age of 21 years.

Every effort is made by arrangement of tour rotas to give them a wide experience in the work of a Public Health Inspector. In order that they may gain a sound knowledge of office work, filing, notice serving, and other duties of a more administrative character, these duties are included, from time to time, in their training programme.

The appreciation shown by the trainees is demonstrated by their enthusiasm and co-operation, and the availability of such useful assistance is called upon regularly by the Inspectorial staff.

RAT DESTRUCTION DISINFECTION AND DISINFESTATION

Rodent Control

The work of rodent control followed the usual pattern in the period under review and below are details of action taken under the *Prevention of Damage by Pests Act, 1949*.

The total number of complaints received during the year was as follows:—

Rats	..	..	..	2,110
Mice	..	..	..	773
TOTAL				2,883

The number of complaints brought forward from the previous year as incompletely dealt with was 112 making the total number dealt with during this year 2,995. To cover these complaints the Rat Operators have made 13,875 visits.

The following table shows the results and how these complaints were dealt with:—

Rat Repression—Summary of work done during 1959

1958				1959			
<i>Business</i>				<i>Business</i>			
<i>Premises</i>	<i>Houses</i>	<i>Other</i>	<i>Total</i>	<i>Premises</i>	<i>Houses</i>	<i>Other</i>	<i>Total</i>
</							

Under Paragraph 1, Clause 3 of the above Act, 2,790 occupiers notified the Department that rats and mice infested their premises and appropriate action was taken.

Verbal notices were served on occupiers or owners of 212 premises drawing their attention to their obligations under the above Act. In all cases these notices were complied with.

The areas of demolition and re-building continue to extend in the City and constant inspections have been made of those sites to check any infestation that may have occurred or been reported. With the exception of the new Bath Bridge site, no evidence was found.

All private and Corporation tips within the City boundary were constantly inspected, and where necessary control action was taken. These areas are generally in a very satisfactory condition.

School kitchens, nurseries and clinics continue to report spasmodic mice infestation, and whenever necessary advice was given on improving conditions at these premises.

The Offensive Trade premises in the St. Philip's Marsh area are now well under control, and a house to house inspection of the private dwellings in the adjoining area failed to reveal any complaint of rats.

Defective drains giving rise to rat infestations were referred to the District Public Health Inspectors for investigation and testing in every case, 113 in all appropriate action was taken.

The special study and treatment of the City's sewer system during the past five years has now reached its conclusion and the whole of the system has been brought under control. The rat population in the main and secondary sewers is the lowest recorded for many years. The City Engineer's staff have been most co-operative and rendered valuable assistance throughout the whole of the investigation.

The following figures show the rodent control work on sewers and attention is drawn to the absence of any complete poison takes:—

No. of manholes baited	.. .. .	1,650
No. of manholes showing prebait take	.. .. .	1,126
No. of manholes showing complete poison take	.. .. .	Nil
No. of manholes showing part poison take	.. .. .	930

Under Paragraph 1, Section 2, surveys and inspections have been made of 4,661 premises. The following shows the result of these surveys:—

Dwelling houses	.. .. .	3,369
Business premises	.. .. .	1,237
Local Authority premises	.. .. .	55

The number of infestations discovered were:—

58 - Rats 61 - Mice

Each Local Authority has its own obligations under the *Prevention of Damage by Pests Act* and in connection with this the river, harbour and canal banks were closely inspected, and, where necessary treatment was carried out.

The general condition of the City, Avonmouth and Portishead Docks is good but during the period under review, there have been periodic infestations by "ship" rats at various points.

A transit shed at Canons Marsh, which is subject to a monthly inspection by the Rat Operators and is regularly visited by the Port Health Inspectors, was found to contain a heavy infestation of ship rats. At the conclusion of the control measures forty five rats were recovered.

Two mills at Avonmouth were found to have infestations of "ship" rat and these cases show the need for constant supervision over these areas.

The following table shows the number of rats recovered from all sources:—

1958				1959						
Avon- mouth	Bristol	Portis- head	Total	Avon- mouth	Bristol	Portis- head	Total			
<i>Rats recovered:—</i>										
<i>Docks, quays, wharves, etc.</i>										
60	—	—	60	Brown	..	..	2	—	—	2
97	—	2	99	Black	..	..	28	45	—	73
20	—	—	20	Mice	..	..	—	—	—	—
<i>City:—</i>										
	98	—	98	Brown	..	..	—	77	—	77
	49	—	49	Black	..	..	—	176	—	176
	30	—	30	Examined for plague			—	23	—	23
	64	—	64	Mice	..	..	—	28	—	28
Grand total—				Grand total—						
306 rats recovered				328 rats recovered						

Reports of rabbits are widespread over the City area, and much damage was done in the various allotments and gardens. Poison gas and shooting was employed with good results. There was a revival of myxomatosis in the area and this has also contributed towards a reduction in the rabbit population.

Damage to poultry etc., by foxes, continues to be reported these being chiefly in the Henbury and Westbury-on-Trym area.

This period was also remarkable for the large increases in wasp complaints as the following figures show:—

		1958	1959
Dealt with by Department	..	140	508
Advice given	.. ..	40	105

Disinfection and Disinfestation

The benefits to health resulting from the endeavours of the Environmental Health Service in many fields cannot readily be assessed. General improvements are noted—people are living longer, the air we breathe is cleaner, higher standards of food hygiene prevail. The work of the Disinfecting Station does, however, afford a more accurate reckoning to be made since the practical control measures adopted through disinfection and disinfestation are positive in character. The Station is well equipped to cope with the variety of demands made upon it and the staff too, is experienced and versatile. The basic work of disinfection and disinfestation constitutes the major activity of the Station. Over 9,000 premises and nearly 54,000 articles were disinfected during the year, and just over 500 premises and some 3,000 articles were disinfested. In addition, nearly 3,700 infected, verminous or filthy articles were destroyed.

Other duties included the collection and disposal of just under 45,000 tins of food and over 11,000 lb. of other foods. This Collection Service is very helpful since, after voluntary or other surrender of the unfit food stuffs, the Inspectors are assured of its proper disposal following condemnation.

Once again the flame-gun equipment held at the Station, was called upon. Pigs, manure and bedding were burnt over a period of 10 hours at a farm where anthrax was suspected. Similar treatment was applied in the case of pigs affected with swine fever and at the Public Abattoir, burning of manure and

bedding, and thorough disinfection of all drives and buildings was carried out over a period of two days following a report of an outbreak of foot and mouth disease at a market supplying animals to the Bristol area.

Flooding of the low lying areas of Bristol on a number of occasions called for the assistance of the Disinfecting Station staff; 287 houses were disinfected and supplies of disinfectant liquid and carbolic powder were issued to any householder who required it. For five days in one case and for 15 hours a day the staff collected and dried furniture, carpets, bedding and clothing. Steel tubular scaffolding and other improvised methods were employed to dry the articles at the Station in order to expedite their return. The City Engineer's Department co-operated in this task by loaning the Station some large grain-drying type heaters.

During the Autumn many premises were invaded by flies, principally cluster flies. Two large hostels for girls and the trees in the grounds, one hotel, 102 flats and 14 roof spaces were sprayed alone during the last week of September. It is interesting to note that no hospital or other type of premises which had been treated during the earlier months of the year, reported any recurrence of infestation. This says much for the correct application and efficacy of the insecticides.

The treatment of cluster flies frequently requires the powder dusting of trees and bushes in the vicinity of buildings. Towards the end of the year approval was given for the purchase of a pressurised powder blower which is capable of distributing insecticidal dust to a much greater height in trees. It is also useful for the treatment of ducting systems and under-floor spaces.

Vermin baths and scabie treatments, the collection, laundering and return of soiled linen from chronic sick cases being nursed at home; the disinfection of ambulances and equipment, work for the Education Department, surrounding local authorities, hospitals, and the Ministry of Works, are some of the other duties undertaken by the Superintendent and his staff, and are indicative of the volume of work performed by this multi-purpose Section of the Health Department.

Disinfections, Drain Tests, etc.

1958		1959
8,808	Premises disinfected	9,175
52,018	Articles disinfected	53,968
3,019	Articles disinfested	3,125
3,994	Articles destroyed	3,672
379	Vermin repression—by spraying	539
117	Vermin baths— men	100
2	— women	2
58	Disinfections for hospitals and nursing homes ..	57
185	Public library books collected and disinfected ..	402
4	Private library books collected and disinfected ..	292
52,668	Foodstuffs, etc., destroyed—canned food ..	44,935
10,616 lb.	other foodstuffs	11,345
768	Food premises visited	675
51	Drain tests	43
2,378	Other work	3,027

ADMINISTRATION OF THE SHOPS ACT, 1950 AND KINDRED LEGISLATION DURING 1959

SHOPS ACT, 1950

General Administration

Another year has passed without new legislation to simplify, or bring up to date, the laws regarding shops' closing hours, or the conditions of employment for thousands of workers in the distributive trades. There was, however, another appeal before the Lord Chief Justice who has put a new interpretation on a generally accepted principle, it would now appear that the Half Holiday Closing Orders, which effect practically every trade in Bristol where the shop must close for a weekly half holiday, cannot be enforced, if another trade is carried on in the same shop.

The number of visits to premises subject to the Shops Act has risen by about 300, to 7,218. Six prosecutions resulted in fines and costs amounting to £52. 14s. 0d. being imposed, £36 of which were in respect of the employment conditions at a Ladies' Hairdressing establishment, and the remainder for selling at prohibited times, including one at the Bristol Ideal Homes and Trades Exhibition.

The Health Committee made Orders exempting the following Exhibitions from the general closing hours:—

- (1) The Bristol Aquarists' Society
- (2) The Bristol Budgerigar and Foreign Bird Society
- (3) The Bristol Flower Show

A further application, the Bristol Ideal Homes and Trades Exhibition was not granted.

Other Enactments

(a) Young Persons (Employment) Act, 1938

There are only a small number of young persons in Bristol to whom the provision of this Act apply, and it was necessary in one instance only for an adjustment to be made in the employment conditions to secure compliance with the Act.

(b) Sunday Entertainment Act, 1935

The number of cinemas open on Sundays has been reduced during the past few years as the premises have been taken over for other purposes. There are now only 19 cinemas giving Sunday performances and no infringements of the employment conditions were reported.

(c) Employment of Women, Young Persons and Children Act, 1920

Routine visits have been made under this Act but no infringements were reported.

Councillor A. E. C. Tudball accompanied by one of the Shops Inspectors attended an Annual Conference of the Institute of Shops Acts Administration at Weymouth.

Shops Act—Environmental Health Aspects

The Section of the 1950 Act dealing with the sanitary and other requirements in shops has received a good measure of attention during the year. The Section calls for suitable and sufficient means of lighting, ventilation, sanitary accommodation, washing facilities and, under certain circumstances, meal rooms for persons employed in or about shops and apart from providing for the welfare of employees, the implementation of these requirements contributes to the promotion of hygiene in the case of food premises. As there is a link-up between the *Shops Act* and the Food Hygiene Regulations in a number of respects, visits to many of the shops are dual purpose in character.

The rapidly expanding shopping areas of Bristol have entailed a considerable amount of work on the examination of plans, but this aspect of the work affords a valuable opportunity for requiring, in all new premises, compliances with appropriate legislation. In addition to the number of new premises a large number of plans have been submitted for new shop fronts. Many of the plans for attractive eye catching shop fronts have had to be watched with care since frequently the former means of ventilation, incorporated in the shop front has been omitted in new proposals. In these cases alterations to proposed shop fronts or provision of alternative means of ventilation by mechanical methods has been required.

Visits and revisits to registerable and non-registerable food shops and other shops totalled 3,414 during the year under review.

Shops Act, 1950

	1958	1959	Premises subject to inspection— Approx. number
<i>Visits</i> —Retail	5,597	5,678	8,200
Wholesale	220	314	400
<i>Revisits</i> — Retail	1,083	1,181	
Wholesale	19	55	
<i>Infringements</i> — Failure to exhibit notices	850	876	
Closing hours	69	54	
Sunday employment ..	27	30	
Half holiday	32	29	
Hours of young persons..	7	18	
Meal intervals	26	36	
Seats for female assistants	8	20	
<i>Verbal Warnings</i>	1,033	1,046	
<i>Warning Letters</i>	—	8	
<i>Legal Proceedings</i>	7	6	

**Employment of Women, Young Persons
and Children Act, 1920**

<i>Visits</i>	5	6	3
<i>Revisits</i>	1	—	
<i>Infringements</i> — Records	—	—	
Night employment	2	—	
<i>Verbal Warnings</i>	—	—	
<i>Written Warnings</i>	—	—	
<i>Legal Proceedings</i>	—	—	

Section 38—Assistants' Facilities

(a) <i>Improved</i>	39	58	
(b) <i>Referred to public health inspectors</i> ..	78	93	

Sunday Entertainment Act—Cinemas

<i>Visits</i>	62	57	19
<i>Revisits</i>	3	1	
<i>Infringements</i> — Holidays	4	—	
Records	3	1	
<i>Verbal Warnings</i>	3	1	
<i>Reported to Licensing Justices</i>	4	—	
<i>Legal Proceedings</i>	—	—	

Young Persons (Employment) Act, 1938

					1958	1959	Premises subject to inspection— Approx. number
Visits	..	..	..	..	74	41	70
Revisits	..	..	..	..	—	3	
Infringements — Notices	..	..	..	..	—	1	
Sunday employment	..			..	—	—
Half holidays	..		..	..	—	—
Hours	..	..	..	..	—	—
Meal intervals	..	..	..	..	1	1	
Night employment	..			..	—	—
Verbal Warnings	..	..	..	..	1	1	
Warning Letters	..	..	..	..	—	—
Legal Proceedings	..	..	..	..	—	—

Time Worked Outside of Office Hours and Observation Patrols

(a) Shops Inspectors—

					1958	1959
Evenings	..	..	..	..	23 hrs. 5 mins.	22 hrs. 20 mins.
Sundays	..	..	..	..	40 hrs. 25 mins.	61 hrs. 45 mins.
Wednesdays (p.m.)	..	..	..	..	169 hrs. 49 mins.	180 hrs. 50 mins.
Saturdays (p.m.)	..	..	..	..	7 hrs. 15 mins.	4 hrs.

(b) Assistants—

Evenings	..	..	..	..	43 hrs. 35 mins.	17 hrs. 15 mins.
Sundays	..	..	..	..	47 hrs. 50 mins.	—
Wednesdays (p.m.)	..	..	..	..	103 hrs. 25 mins.	65 hrs.
Saturdays (p.m.)	..	..	..	..	—	—

THE REPORT OF THE PUBLIC ANALYST AND OFFICIAL AGRICULTURAL ANALYST FOR THE CITY AND COUNTY OF BRISTOL FOR THE YEAR 1959

(Incorporating the Work on behalf of the County of Gloucester and the City of Gloucester)

E. G. Whittle, B.Sc. (Lond.), F.R.I.C.

STAFF FOR THE YEAR

(indicating also the agreed establishment where changes are involved)

<i>Public Analyst</i>	..	..	Scientific Adviser: E. G. Whittle, B.Sc. (Lond.), F.R.I.C.
<i>Additional Public Analyst</i>	..	..	Deputy Scientific Adviser: I. Dembrey, B.Sc. (Bristol), F.R.I.C.
<i>First Assistant</i>	..	..	Principal Assistant: G. G. Fisher, B.Sc. (Birm.), F.R.I.C.
<i>Second Assistant</i>	..	..	Principal Assistant: D. J. Taylor, B.Sc. (Lond.), A.R.I.C.
<i>Assistant Analyst</i>	..	..	Principal Assistant: Miss M. V. Westcott, M.Sc. (Bristol)
„	„	..	Principal Assistant: Mrs. A. Jones, B.Sc. (Dublin)
<i>Assistant Spectroscopist</i>	..	..	Principal Assistant: Miss J. Ayerst, B.Sc. (Bristol)
„	„	..	Principal Assistant: Mrs. J. K. Noyes
<i>Chlorination Officer</i>	..	..	Field Officer: R. C. M. Putnam, M.I.P.H.E.
<i>Chief Technician</i>	..	..	„ „ C. R. Turner
<i>Student Technician</i>	..	..	Technician: Mrs. J. Withers
„	„	..	„ „ G. P. Hall
„	„	..	Junior Technician: Miss V. Bromwich
„	„	..	„ „ B. L. Bullock
„	„	..	„ „ M. A. Wagner
„	„	..	„ „ Mrs. M. Humphreys
„	„	..	„ „ D. Morgan
„	„	..	„ „ Miss H. Ninnies
<i>Secretary</i>	..	..	„ „ Mrs. I. Hall
<i>Assistant Secretary</i>	..	..	„ „ Miss S. J. Kirby
<i>Laboratory Attendant</i>	..	..	„ „ Mrs. N. Budd
„	„	..	„ „ Mrs. K. Comber (part time)

Research Assistant to be appointed

INTRODUCTION

This has been a momentous year for the laboratory. Since 1934 the Department has formed the Chemical Section of the Department of Preventive Medicine of the University of Bristol. A combination of events and circumstances has resulted in the disbandment of the "set up" which has existed for 25 years and 1959 has been a year of negotiation and reorganisation which culminated on the return of the Department to the control of the City as from 1st January 1960.

In passing it is of interest to note that it was hoped that our stay at Canynge Hall would not exceed three years, and as stated above, this has stretched to 25 years and seems likely to continue for at least another 5 years. It is my sincere hope that we may then see new and properly designed accommodation of the kind a city of half a million people deserves rather than the succession of makeshift abodes the Department has had now for well over 50 years.

There is little doubt in recent years that the nature of the work of the Department has both grown in scope and changed in character. As this trend seems likely to continue with increasing calls on laboratory services from other Departments of the Corporation it was decided that the Department should be known as the Scientific Branch of the Public Health Department. The Public Analyst's functions obviously remain a prime concern, but there is little doubt that in this City the Analyst has indeed become the Scientific Adviser to the Local Authority and will hence be thus designated. Several other changes were made and certain long overdue regradings of staff were agreed with considerable benefit to qualified staff. The Department will now have two principal assistants holding degrees and fellowship qualifications, two assistants with degrees and/or the Associateship qualifications, two spectroscopists also of graduate status and a chief technician linked with an establishment of four technician appointments in an attempt to retain the services of student technicians who satisfied three main conditions, viz:—

- (a) secured the Higher National Certificate in Chemistry
- (b) had served three years in the laboratory
- (c) had the approval of the Head of Department.

Other changes included the redesignation of the Chlorination Officer as the Field Officer to meet the growing need for an officer to deal with the many calls, visits and inspections, both in the City and the County. There will be also four junior or student technicians designated as junior if qualifications on appointment warrant. The secretary and clerical assistant remain as before as do the laboratory attendant posts. One of the latter is part-time and may eventually become full-time.

Provision was made for the appointment of a Research Assistant at A.P.T.II grading. Such an assistant is required to help in the compilation of reports, abstracting technical journals and helping with special research and investigations required by the Department. This individual has not yet been appointed, but there is little doubt that the right person could prove of the greatest value in a busy laboratory anxious to keep up-to-date in the analytical field.

With the resignation of Mrs. J. K. Noyes in December the Department requires one additional Spectroscopist, as stated above, to be of graduate standing possibly with physics as the main subject in order that this appointment may appropriately complement that of Miss J. Ayerst who joined the staff in July.

Interest in radiation problems was maintained during the year but it must be a matter of regret that both authorities whom we serve have accepted central Government policy inasmuch as no local monitoring services will be set up in this laboratory. In consequence no provision was made in the revised establishment for a Physicist (Radiochemist) and a Technician as was at one time envisaged as necessary if the Department had been required to study radiation problems and hazards as might affect local authorities.

Congratulations are due to Mr. D. J. Taylor on his success in securing the Diploma of the Royal Institute of Chemistry (Branch E) and to Mr. R. C. M. Putnam on being elected a Corporate member of the Institution of Public Health Engineers.

Mr. Taylor in consequence became one of our new Principal Assistants whilst Mrs. J. Withers and Mr. G. P. Hall, having obtained the Higher National Certificate in Chemistry, qualified for appointment as the first two Technicians of the four permitted in our establishment.

Apart from the staff changes in the Spectroscopic Section of our work we have been fortunate in maintaining a full complement although there have been the inevitable annual changes in technician staff. Wilson, McKenna and Jacobs all left during the year and were replaced by Miss H. Ninnies, Miss V. Bromwich and B. L. Bullock.

I would also congratulate Mr. D. J. Taylor, Miss A. Sinclair Rose and Miss M. deGay and their respective partners on the elevation to the married status. Miss Rose becomes Mrs. Jones and Miss deGay is now Mrs. Humphreys.

Yet another milestone in the Department's history has to be recorded. For the first time the overall examinations carried out during the year exceeded 10,000. It is appreciated that mere figures can convey little of the effort of the year but the method of compiling the record of samples and examinations has been consistently returned along the same lines over many years now so the comparative effort and achievement of recent years is readily seen. Significant increases of sampling were noted in milk and miscellaneous analyses and the latter reached the record number of 1414, of which nearly 900 were articles received from the Port Health Office. The County Authority also submitted three times their 1958 quota of miscellaneous articles. Stress must be laid on this aspect of the Departmental work because these miscellaneous items are of an extraordinarily varied character, usually involving lengthy examination, and almost invariably requiring the attention of senior staff who alone have the "know how" to cope with such problems. Other significant increases relate to spectrophotometric examinations and smoke and sulphur dioxide recordings for the Port of Bristol Authority. If any further evidence should be required of the value of the work it is worthwhile stressing that adulteration of foods, and particularly of milk, is still very much with us, for in 1959 for milk alone we recorded a 13.6 per cent adulteration rate on the 1080 samples examined—the highest figure since 1956 when the percentage was 8.5 of all milk samples. Whilst it must be admitted that the figure of 13.6 per cent is heavily weighted by repeat and follow up samples it nevertheless provides the answer to the often asked question—is milk still being adulterated?

Finally I take this opportunity of thanking all members of the staff for their help and willing service and all Inspectors of the three authorities served by the laboratory for the happy relationship, help and consideration throughout the year.

The Report is divided in the usual fashion into the Introduction and eleven parts as under:—

Part I	Food and Drugs Act
Part II	Fertilisers and Feeding Stuffs Act
Part III	Waters, Swimming Bath Samples, Effluents, Sewage and Chlorination
Part IV	Rag Flock Act
Part V	Pharmacy and Poisons Act
Part VI	Miscellaneous Analyses
Part VII	The County of Gloucester Report
Part VIII	The City of Gloucester Report
Part IX	Atmospheric Pollution
Part X	Spectroscopy
Part XI	Other Activities

Table I—Summary of Samples examined during the year ended 31st December 1959, for the City and County of Bristol, the County of Gloucester, and the City of Gloucester

	<i>Bristol</i>	<i>Gloucester County</i>	<i>Gloucester City</i>
Milk	1,080	750	34
Food and drugs	2,948	536	36
Waters and swimming baths	252	120	5
Fertilisers and feeding stuffs	258	73	—
Miscellaneous	1,281	98	1
Merchandise Marks Act	1	1	—
	<hr/> 5,820	<hr/> 1,578	<hr/> 76
 Rag Flock Act	 33	 —	 —
District Health Inspectors' samples	33	—	—
Pharmacy and Poisons Act	33	6	—
Atmospheric Pollution—			
Lead peroxide	96	84	24
Deposit gauges	72	83	24
Zinc and Fluorine	24	—	—
Smoke recordings, City	282	—	—
" Port Authority	718	—	—
Spectrophotometric analyses	878	11	1
Chlorination	188	24	—
Vitamin B ₁₂ assays	21	—	—
	<hr/> 2,378	<hr/> 208	<hr/> 49
 Total	 8,198	 1,786	 125

Grand Total 10,109

PART I. FOOD AND DRUGS ACT

New Legislation, Reports and Recommendations in 1959

Statutory Instruments 1959 No. 471—The Labelling of Food (Amendment) Regulations

These regulations which apply in England and Wales only, amend the Labelling of Food Order, 1953, as amended (which Order has effect in England and Wales as if contained in regulations made under section 7 of the Food and Drugs Act, 1955) by inserting therein new provisions relating to ice-cream.

These provisions:—

- (a) prohibit the labelling, marking or advertising of ice-cream, in a manner suggestive of butter, cream, milk or anything connected with the dairy interest unless the ice-cream contains no fat other than milk fat (apart from fat introduced by the use as an ingredient of any egg any flavouring substance or any emulsifying or stabilising agent) but permit the presence of skimmed milk solids to be declared;
- (b) impose requirements as to the labelling of pre-packed ice-cream containing fat other than milk fat (apart from fat introduced through an ingredient as aforesaid).

The regulations also make minor drafting changes in Tables A and C of the First Schedule to the Principal Order.

The Labelling of Food (Amendment) Regulations amend the Labelling of Food Order (S.I. 1953 No. 536, as amended) by inserting therein new provisions relating to ice-cream. They prohibit the labelling, marking or advertising of ice-cream in a manner suggestive of butter, cream, milk or anything connected with the dairy interest unless the ice-cream contains no fat other than milk fat except such as may be introduced by the use as an ingredient of any egg, flavouring substance or emulsifying or stabilising agent, but permit the presence of skimmed milk solids to be declared. The regulations also provide that it will be an offence after 30th November, 1959, to sell under the description ice-cream any pre-packed ice-cream which contains fat other than milk fat unless it bears on the wrapper or container a declaration "Contains non-milk fat", or, if appropriate, "Contains vegetable fat" and minimum sizes of type are prescribed.

Statutory Instruments No. 472—The Food Standards (Ice Cream) Regulations

These regulations replace the Food Standards (Ice-Cream) Order, 1953, in its application to England and Wales.

The Schedule

Standards of Composition for Ice-Cream

1. The standard of composition for ice-cream (whether or not it forms part of a composite article of food) shall be as follows:—

- (a) Ice-cream shall contain not less than 5 per cent fat and $7\frac{1}{2}$ per cent milk solids other than fat so, however, that where ice-cream contains any fruit, fruit pulp or fruit purée it shall either conform to the above standard or, alternatively, the total content of fat and milk solids other than fat shall be not less than $12\frac{1}{2}$ per cent of the whole including the fruit, fruit pulp or fruit purée, as the case may be, and such total content of fat and milk solids other than fat shall include not less than $7\frac{1}{2}$ per cent fat and 2 per cent milk solids other than fat:

Provided that as respects any ice-cream sold, or offered or exposed for sale under any of the descriptions hereinafter specified, or under any such other description as is calculated to lead an intending purchaser to believe that he is purchasing ice-cream of any such description as is so specified, the standard of composition shall be as follows:—

- (i) Dairy Ice-Cream, Dairy Cream Ice or Cream Ice shall in each case contain not less than 5 per cent milk fat and no other fat (save as may be introduced by the use as an ingredient of any egg, any flavouring substance or any emulsifying or stabilising agent) and not less than $7\frac{1}{2}$ per cent milk solids other than fat, so, however, that where any Dairy Ice-Cream, Dairy Cream Ice or Cream Ice contains any fruit, fruit pulp or fruit purée, it shall either conform to the standard of composition for that ice-cream or, alternatively, the total content of milk fat and milk solids other than fat shall be not less than $12\frac{1}{2}$ per cent of the whole including the fruit, fruit pulp or fruit purée, as the case may be, and such total content of milk fat and milk solids other than fat (save as may be introduced by the use as an ingredient of any egg, any flavouring substance or any emulsifying or stabilising agent) and not less than 2 per cent milk solids other than fat.
 - (ii) Milk Ice or Milk Ice containing any fruit, fruit pulp or fruit purée shall contain not less than $2\frac{1}{2}$ per cent milk fat and no other fat (save as may be introduced by the use as an ingredient of any egg, any flavouring substance or any emulsifying or stabilising agent) and not less than 7 per cent milk solids other than fat.
 - (iii) “Parev” (kosher) ice shall contain not less than 10 per cent fat and no milk fat or other derivative of milk.
- (b) No ice-cream of any description shall contain any artificial sweetener.

2. In this Schedule:—

- (a) “artificial sweetener” means any chemical compound which is sweet to the taste, and the expression includes polyhydric alcohols but does not include sugar or any other carbohydrate;
- (b) each reference to any proportion or percentage means that proportion or percentage by weight.

Statutory Instruments 1959 No. 616—The Fabrics (Misdescription) Regulations

These Regulations, which come into operation on 11th May, 1959, prescribe new standards of non-inflammability for textile fabrics to which the *Fabrics (Misdescription) Act, 1913* applies, namely, textile fabrics to which is attributed the quality of non-inflammability or safety from fire or any degree of that quality.

The new standards, which have been formulated and published by the British Standards Institution, replace those prescribed in earlier Regulations made by the Secretary of State on 20th January, 1914, and by the Secretary of State for Scotland on 12th February, 1914, which are now revoked.

Statutory Instruments No. 734—The Ice Cream (Heat Treatment etc.) Regulations

These Regulations consolidate and amend the Ice-Cream (Heat Treatment, etc.) Regulations, 1947 to 1952. They require that ingredients used in the manufacture of ice-cream are to be pasteurised by one or other of three specified methods or sterilised and thereafter kept at a low temperature until the freezing

process is begun. The Regulations make it an offence to sell or offer for sale ice-cream which has not been so treated or which has been allowed to reach a temperature exceeding 28 F. without again being treated. They exempt from the requirements as to pasteurisation or sterilisation certain types of water ices and ice lollies, which are sufficiently acid to make such treatment unnecessary.

Statutory Instruments 1959 No. 831—The Arsenic in Food regulations

These regulations, which apply to England and Wales only, provide that, subject to certain exceptions, it shall be an offence to sell, consign or deliver, or import into England or Wales, any food which contains more than 1.0 part per million of arsenic. Lower limits are specified for beverages, some soft fruit concentrates and ice-cream and higher limits are specified for some foods which, generally, are either essences or ancillary foods.

The Schedule

<i>Description of food</i>	<i>Proportions of arsenic (expressed in terms of parts per million estimated by weight)</i>
1. Non-alcoholic beverages, ready to drink, not otherwise specified	0.1
2. Alcoholic beverages not otherwise specified	0.2
3. Black beer and mixtures of black beer and rum	0.5
4. Soft drinks intended for consumption after dilution and undiluted fruit juices (including concentrates intended for consumption after dilution to an extent not greater than ten parts to one, calculated by volume, for use by a manufacturer of soft drinks)	0.5
5. Ice-cream (including frozen confections and any other similar commodity)	0.5
6. Onions (dehydrated)	2.0
7. Hops (dried) other than those intended for use for commercial brewing	2.0
8. Liquorice (dried extract)	2.0
9. Gelatine (edible)	2.0
10. Pectin (liquid)	2.0
11. Yeast and yeast products	2.0
	(calculated on the dry matter)
12. Chemicals not otherwise specified but not including synthetic colourings	2.0
13. Chicory (dried and roasted)	4.0
14. Herbs (dried)	5.0
15. Finings and clearing agents	5.0
16. Hops concentrates other than those intended for use for commercial brewing	5.0
17. Pectin (solid)	5.0
18. Spices (including mustard)	5.0
19. Colourings other than synthetic colourings	5.0
	(calculated on the dry colouring matter)
20. Chemicals for which an arsenic limit is specified in the British Pharmacopoeia or the British Pharmaceutical Codex but not including synthetic colourings	2.0
	or the limit specified in the edition of the British Pharmacopoeia or the British Pharmaceutical Codex current for the time being, whichever is the higher.

Statutory Instruments No. 1098—The Condensed Milk Regulations

These regulations, which apply in England and Wales only, substantially re-enact in a consolidated and revised form the Public Health (Condensed Milk) Regulations, 1923, as subsequently amended. Certain new provisions have been introduced, the principal ones being:—

- (a) to provide for the sale of condensed partly skimmed (half cream) milk labelled "should not be used for babies except under medical advice" (Paragraphs 1 (c) and (d) of the First Schedule);
- (b) to define half cream milk as meaning milk which contains not less than 10·8 per cent of milk solids including not less than 1·8 per cent of milk fat (Paragraph 2 of the First Schedule);
- (c) to prescribe minimum percentages of milk fat and milk solids including fat for condensed partly skimmed (half cream) milk (Second Schedule).

Statutory Instruments No 2106—The Fluorine in Food Regulations

These regulations replace the Fluorine in Food Order 1947, in its application to England and Wales.

The regulations prescribe reduced maximum limits for the fluorine content of acidic phosphates used for food purposes and of foods containing acidic phosphates as follows:—

<i>Food</i>	<i>Maximum Fluorine Content (expressed in terms of parts per million)</i>
1. Self-raising flour or any similar mixture (not included in item 2 below) containing a farinaceous substance and an acidic phosphate	3
2. Baking powder, including golden raising powder	15
3. Any article or substance (not included in any of the foregoing items) used as an ingredient in the preparation of food and consisting wholly or partly of an acidic phosphate ..	30 (of the acidic phosphates present)

Food Standards Committee—Report on Soft Drinks

A report by the Food Standards Committee examines the need for control over the composition, labelling and advertising of soft drinks and contains proposals for revision of the Food Standards (Soft Drinks) Order, 1953. It takes account of evidence received from the soft drinks industry and other interests, including those concerned with the enforcement of food and drugs legislation.

The Committee consider that the wide variety of soft drinks and the lack of information about their composition may give rise to confusion. Where soft drinks contain fruit constituents, they recommend that, for the guidance of purchasers, manufacturers should be required to declare on the labels the amount of fruit or fruit juice which the drinks contain. The Committee also consider that minimum standards of fruit or fruit juice content are necessary for the protection of the consumer. They propose that the present standards for "squashes" should be retained, and that the existing standard for "drinks made from whole fresh oranges" should be replaced by one based on the fruit content of the drink as sold, and covering the use of other citrus fruit as well as oranges.

The Committee take the view that soft drinks should be sweetened wholly with sugar or other carbohydrate sweetening matter and that the use of saccharin or other artificial sweetening agents in soft drinks should be prohibited.

Apart from a prohibition on the use of artificial sweetening, statutory control over the composition of carbonated and flavoured beverages is not thought to be necessary; these beverages would then no longer be exempt from the requirements of the Labelling of Food Order as respects declaration of ingredients. It is recommended, however, that the standards for tonic water and soda water should be retained.

In the opinion of the Committee no soft drink at present on sale whether sweetened with sugar or with glucose is a sufficient source of carbohydrate to justify special claims relating to energy value. They propose therefore that the use of any form of testimonial or nutritional claim based on the carbohydrate content should be prohibited in the labelling and advertising of soft drinks. They also recommend that a special standard for glucose beverages is not justified and that use of the term "glucose" should not be permitted in connection with the labelling and advertising of soft drinks.

Other recommendations are that the acids suitable for use in soft drinks should be specified in any revised regulations, and that the appropriate minimum standards should be applied to all sales of soft drinks in catering establishments.

Lead in Food—Proposals for Regulations

The Minister of Agriculture, Fisheries and Food proposes to make jointly with the Minister of Health regulations limiting the lead content of food. These regulations will be made under sections 4 and 123 of the *Food and Drugs Act 1955*, and will apply to England and Wales. The Secretary of State for Scotland proposes to make corresponding regulations under sections 4 and 56 of the *Food and Drugs (Scotland) Act, 1956* and the Minister of Health and Local Government for Northern Ireland has under consideration similar regulations concerning the lead content of food sold in Northern Ireland.

The Schedule

<i>Food</i>	<i>Parts per million w/w Lead</i>	
	<i>Date of Enforcement</i>	
	<i>3 months after the date of making</i>	<i>Two years and three months after the date of making</i>
Beverages, alcoholic and non-alcoholic, ready to drink, not otherwise specified	0.2	
Soft drinks ready-to-drink	0.4	0.2
Brandy, gin and geneva, rum and whisky ..	0.5	0.2
Concentrated soft drinks	1	0.5
Wines, liqueurs, alcoholic cordials and cocktails and alcoholic liquors not otherwise specified ..	1	0.5
Beer	1	0.5
Cider	1	0.5
Fruit and vegetable juices (including tomato juice but not including lime juice and lemon juice) ..	1	0.5
Tomato juice cocktails	1	
Pre-packed ready prepared milk-based beverages	1	
Concentrated fruit juices and lime and lemon juice	2.0	
Anhydrous dextrose and dextrose monohydrate	0.5	
Oils and fats (edible)	0.5	
Refined white sugar (sulphated ash content not exceeding 0.03 per cent.)	0.5	
Ice-cream (including frozen confections and any other similar commodity)	1.0	0.5
Tomato purée, paste or powder (containing 15 per cent or more, but less than 25 per cent total solids)	3.0	
Tomato purée, paste or powder containing 25 per cent or more total solids	5	
Concentrates used in the manufacture of soft drinks	5	2.5
Canned fish	5	
Canned fish pastes	5	
Canned meat	5	
Canned meat pastes	5	
Dried or dehydrated vegetables (other than onions)	5	
Gelatine (edible)	5	
Lecithin	5	
Meat extracts and hydrolysed protein	5	
Raw sugars intended only for the manufacture of refined sugar. All other types of sugar, sugar syrups, invert sugar and direct consumption coloured sugars having a sulphated ash content exceeding 1.0 per cent	5	
Molasses (edible)	5	
Caramel	5	
Liquid and solid glucose and starch conversion products with sulphated ash content exceeding 1 per cent	5	
Cocoa powder	5 on the dry fat free substance	
Chemicals for which a lead limit is specified in the B.P. or B.P.C.	The limits specified in the edition of the B.P. or B.P.C. current for the time being	
Yeast and yeast products	7 on the dry matter	
Tea	10	
Herbs (dried) and spices (other than ground spices)	10	
Onions (dehydrated)	10	
Alginic acid, alginates, agar, carrageen and similar products derived from seaweed	10	
Pectin (liquid)	10	
Chemicals not otherwise specified	10	
Flavourings	10	
Ground spices	20	
Food colourings (except caramel)	20 on the dry colouring matter	
Pectin (solid)	50	

Table 2

Foods

<i>Nature of Sample</i>	<i>Total Examined</i>	<i>Number adulterated or otherwise irregular</i>
Milks	1080	147
Ales and stouts	23	—
Arrowroot	5	—
Almond paste	4	—
Angelica	1	—
Biscuits	24	—
Bread crumbs	2	—
Bisto	1	—
Bread	20	—
Butter beans	2	—
Baking powder	10	—
Bread and butter	3	2
Blancmange powder	11	—
Baking powder	1	—
Butter	46	5
Bottled pig trotters	1	—
Chocolate vermicelli	3	—
Caraway seeds	1	—
Creamed almond	1	—
Caramel dessert	1	—
Cereals	4	—
Cakes	22	2
Cream rice milk pudding	1	—
Christmas pudding	3	—
Corn oil for frying	2	—
Cake decorations	2	—
Cocoa	13	—
Cider	21	—
Chocolate spread	5	—
Colourings and flavourings	87	—
Canned Roasted Caterpillars	1	—
Canned fruit	49	—
Canned fish	42	—
Canned vegetables	10	—
Canned soup and powder	19	—
Canned tomatoes and juice	7	—
Canned meat	37	—
Custard powder	16	—
Cooking fat	11	—
Cream of tartar	4	—
Cornflour	10	—
Coconut desiccated	22	—
Coffee and chicory essence	8	—
Coffee blended	1	—
Coffee ground	9	—
Coffee instant	1	—
Cream	58	—
Cheese spread and processed	33	—
Condensed and evaporated milk	5	—
Cake and sponge mix	30	—
Curry powder and paste	9	—
Dried milk powder	9	—
Dripping	6	—
Dried fruit	47	—
Dried herbs	3	—
Dried vegetables	27	—
Drinking chocolate	7	—
Edifas	3	—
Eggello	1	—

<i>Nature of sample</i>	<i>Total examined</i>	<i>Number adulterated or otherwise irregular</i>
Frozen foods	24	—
Flavoured straws	1	—
Flavoured milk syrup	10	—
Frittamix	1	—
Flavoured drink	1	—
Frozen pastry	2	—
Fish cakes	4	—
Frozen fish	5	—
Flour	30	—
Fresh fruit	83	4
Fish and meat paste	28	—
Gravy browning and powder	10	—
Golden Raising Powder	12	—
Glucose syrup	1	—
Golden Syrup	1	—
Glacé fruit	19	—
Ginger, crystallized, chocolate, ground and syrup	11	—
Ground almonds	21	—
Gelatine	12	—
Homogenised milk	1	—
Haricot beans	6	—
Horseradish relish	10	—
Honeycomb mould	1	—
Horlicks	1	—
Ice cream	179	1
Ice cream powder	1	—
Instant Whip	1	—
Ice lollie	94	—
Icing sugar	8	—
Jelly, cubes, powder and crystals	37	—
Junket powder	6	—
Jelly Figs	1	—
Lard	19	—
Liquid apples	1	—
Lemonade crystals and powder	48	—
Milk, fresh	1	—
Milk shake powder	2	—
Malted milk	3	—
Meringue powder	4	—
Milk flavourings	1	—
Mushrooms in rice	1	—
Mint in malt vinegar	3	—
Marzipan	25	—
Marzipan fruits	1	—
Marzipan substitute	2	—
Mustard	14	—
Meat products	42	2
Meat extracts	6	—
Margarine	43	—
Margarine pastry	1	—
Macaroni	7	—
Nutmeg	3	—
Oats	2	—
Ovaltine	1	—
Pickles, sauces and chutney	40	—
Pickling spice	2	—
Pea flour	1	—
Perry	1	—
Porage oats	1	—
Preserves	86	—
Pastries	2	—
Peanut butter	4	—
Pickled eggs	1	—

<i>Nature of Sample</i>	<i>Total Examined</i>	<i>Number adulterated or otherwise irregular</i>
Periwinkles	1	—
Pepper	12	—
Pepper sauce	1	—
Patum Peperium	1	—
Pure egg macaroni	1	—
Potato powder	3	—
Puff pastry	5	—
Rice	12	—
Royal Chiffon (pie filling)	1	—
Rusks	1	—
Rum butter	1	—
Ruskit sausage filler	1	—
Spirits	49	—
Suet	3	—
Salted cockles	1	—
Sterilized seasoning for sausage and sausage meat	1	—
Salad cream and mayonnaise	35	—
Sandwich spread	3	—
Spread (orange)	1	—
Savoury relish	1	—
Smoked sparrow on skewer	1	—
Sausages	40	—
Sugar strands	2	—
Smoked octopus	1	—
Sweet corn	2	—
Sugar	29	—
Stuffing	12	—
Spaghetti	1	—
Salt	11	—
Salted almonds	1	—
Spice	7	—
Soft drinks	101	1
Sweets	81	—
Syrup	1	—
Soup balls	1	—
Semolina	8	—
Sago	2	—
Tomato purée	3	—
Trifle pack	1	—
Tapioca	1	—
Treacle	1	—
Tomato juice	11	—
Tinted sugar crystals	1	—
Tea	32	—
Vinegar, malt and non-brewed condiment	27	1
Vegetarian gravy powder	1	—
Vegetarian food	8	—
Vegetable juices	3	—
Whipping compound	1	—
Whipping compound cream	1	—
White shortening	1	—
Wine—alcoholic	27	—
Wheat embryo	1	—
Yoghourt	2	—
Yeast extract	8	—
Yeast	1	—
Za Za Insects	1	—
	3,442	165

Drugs							Total Examined	Number adulterated or otherwise irregular
Nature of Sample								
Anadin tablets .. .. .	..	..	..	..	..	..	2	—
Anethainc ointment .. .. .	..	..	..	..	..	..	1	—
Acetone B.P.C. .. .. .	..	..	..	..	..	..	1	—
Anti-rheumatic cubes .. .. .	..	..	..	..	..	..	1	—
Antiseptic baby cream .. .. .	..	..	..	..	..	..	1	—
Analgesic tablets .. .. .	..	..	..	..	..	..	2	—
Asthma tablets .. .. .	..	..	..	..	..	..	4	—
Antiseptic cream .. .. .	..	..	..	..	..	..	5	—
Artificial glycerine .. .. .	..	..	..	..	..	..	1	—
Aneurin tablets .. .. .	..	..	..	..	..	..	4	—
Antacid absorbent tablets .. .. .	..	..	..	..	..	..	3	—
Antacid tablets and powder .. .. .	..	..	..	..	..	..	3	—
Antimidge lotion and cream .. .. .	..	..	..	..	..	..	4	—
Almond oil .. .. .	..	..	..	..	..	..	4	—
Antiseptic germicide .. .. .	..	..	..	..	..	..	1	—
Ascorbic acid tablets .. .. .	..	..	..	..	..	..	5	—
Aspirin tablets .. .. .	..	..	..	..	..	..	7	—
Analgesic alkaline tablets .. .. .	..	..	..	..	..	..	1	—
Antipyrin tablets .. .. .	..	..	..	..	..	..	1	—
Ammoniated tincture of quinine .. .. .	..	..	..	..	..	..	3	—
Bicarbonate of soda .. .. .	..	..	..	..	..	..	5	—
Baby soothing syrup .. .. .	..	..	..	..	..	..	1	—
Bismuth digestive tablets .. .. .	..	..	..	..	..	..	1	—
Beecham's Pills .. .. .	..	..	..	..	..	..	1	—
Bayleaves .. .. .	..	..	..	..	..	..	1	—
Boracic crystals and powder .. .. .	..	..	..	..	..	..	9	—
Bisurated Magnesia .. .. .	..	..	..	..	..	..	1	—
Borax and honey .. .. .	..	..	..	..	..	..	1	—
Borax .. .. .	..	..	..	..	..	..	5	—
Bismuth formic iodide compound .. .. .	..	..	..	..	..	..	1	—
Back and kidney pills .. .. .	..	..	..	..	..	..	2	—
Bisurated lozenges .. .. .	..	..	..	..	..	..	1	—
Boric acid ointment .. .. .	..	..	..	..	..	..	10	—
Blaud's pills .. .. .	..	..	..	..	..	..	2	—
Burn scald cream .. .. .	..	..	..	..	..	..	1	—
Butter gums .. .. .	..	..	..	..	..	..	1	—
Barley sugar .. .. .	..	..	..	..	..	..	1	—
Cream of Magnesia Wafers .. .. .	..	..	..	..	..	..	1	—
Chest and lung mixture .. .. .	..	..	..	..	..	..	1	—
Codeine tablets .. .. .	..	..	..	..	..	..	7	—
Cold cream .. .. .	..	..	..	..	..	..	2	—
Cough syrup and tablets .. .. .	..	..	..	..	..	..	5	—
Calcium Lactate tablets .. .. .	..	..	..	..	..	..	3	—
Children's travel sickness tablets .. .. .	..	..	..	..	..	..	1	—
Chilva (for coughs) .. .. .	..	..	..	..	..	..	1	—
Corn remover .. .. .	..	..	..	..	..	..	2	—
Chocolate laxative .. .. .	..	..	..	..	..	..	4	—
Cough linctus .. .. .	..	..	..	..	..	..	2	—
Cocoanut oil .. .. .	..	..	..	..	..	..	1	—
Colloidal Kaolin .. .. .	..	..	..	..	..	..	1	—
Carbolic ointment .. .. .	..	..	..	..	..	..	1	—
Champagne Bubble Bath .. .. .	..	..	..	..	..	..	1	—
Cold sore lotion .. .. .	..	..	..	..	..	..	1	—
Cod liver oil .. .. .	..	..	..	..	..	..	3	—
Castor oil .. .. .	..	..	..	..	..	..	5	—
Cascara Sagrada tablets .. .. .	..	..	..	..	..	..	3	—
Chilblain tablets and ointment .. .. .	..	..	..	..	..	..	2	—
Cough candy .. .. .	..	..	..	..	..	..	1	—
Calamine lotion .. .. .	..	..	..	..	..	..	12	—
Chlorodyne .. .. .	..	..	..	..	..	..	1	—
Chlorophyll tablets .. .. .	..	..	..	..	..	..	2	—
Camphorated oil .. .. .	..	..	..	..	..	..	2	—
Compound bismuth lozenges .. .. .	..	..	..	..	..	..	7	—
Camphor ice .. .. .	..	..	..	..	..	..	1	—
Compound liquorice powder .. .. .	..	..	..	..	..	..	5	—

<i>Nature of Sample</i>	<i>Total Examined</i>	<i>Number adulterated or otherwise irregular</i>
Diabetic chocolate	3	—
Diabetic chocolate mould	1	—
Diabetic salad cream	1	—
Distilled Witch Hazel	12	—
Digestif tablets	1	—
Digestion tablets	1	—
Dried brewer's yeast	1	—
Ephedrine tablets	7	—
Effervescent saline	1	—
Eye lotion and tablets	6	—
Eucalyptus oil	4	—
Epsom Salts	5	—
Embrocation	1	—
Extract of malt with cod liver oil	1	—
Ear drops	2	—
Extract of malt	1	—
Easton syrup	1	—
Friar's Balsam	9	—
Flowers of sulphur	5	—
Fruit flavours with vitamin C	1	—
Foot ointment and powder	6	—
Family ointment	1	—
First aid cream	1	—
Glucose tablets	1	—
Glucose syrup	1	—
Glucose drink granules	1	—
Glauber's salt	14	—
Gout and rheumatic mixture	1	—
Glucose mint sweets	1	—
Glycerine lemon and honey	3	—
Glycerine	7	—
Golden eye ointment	1	—
Glycerine of borax	3	—
Hydrogen peroxide	10	—
Headache tablets	1	—
Halibut Liver Oil Capsules	10	—
Haliborange tablets	1	—
Influenza capsules	1	—
Iodine	7	—
Iodine ointment	4	—
Iodine solution (phenolated)	1	—
Iodised throat lozenges	1	—
Influenza cold mixture	2	—
Indigestion tablets	12	—
Insect repellent	3	—
Insect sting lotion	1	—
Kidney pills	1	—
Kaolin powder	9	—
Liver tone tablets	1	—
Liquid soap (surgical)	1	—
Laxative tablets, chocolate and gum	11	—
Liquid paraffin	11	—
Lung healer	1	—
Liquorice stick	1	—
Liquid inhalant	2	—
Linctus of Pholcodene	1	—
Menthol and medicated snuff	2	—
Medicated shampoo	1	—
Magnesia powder	2	—
Medicated hair cream	1	—
Medicated sweets	1	—
Menthol and eucalyptus sweets	1	—
Milk of Magnesia tablets	2	—
Myrrh and borax	1	—
Massage cream	1	—

<i>Nature of Sample</i>	<i>Total Examined</i>	<i>Number adulterated or otherwise irregular</i>
Neutradonna	1	—
Nerve tonic tablets	1	—
Nasal drops	1	—
Nicotinic acid tablets	3	—
Oil of Spike Lavender	1	—
Olive oil	7	—
Oil of cloves	2	—
Ointment of phenol	1	—
Phenolphthalein	5	—
Preludin	1	—
Pain killing liniment	1	—
Parrish's Chemical Food	5	1
Pink Champagne Shampoo	1	—
Pink Healing Ointment	1	—
Powdered gelatine	6	—
Pure glucose sweets	1	—
Pasteurised stoned dates	1	—
Phenacetin tablets	3	—
Rose hip Syrup	1	—
Rubbing oil	1	—
Stomach digestive tablets	1	—
Smelling bottle	5	—
Sweetening tablets	4	—
Soda mint tablets	4	—
Sodium citrate tablets	5	—
Syrup of cocillana	1	—
Special diabetic beans in tomato sauce	1	—
Special diabetic processed peas	1	—
Soothing powder	14	—
Sal Volatile	17	6
Sun lotion and sunburn cream	3	—
Saccharin tablets	18	—
Skin lotion	1	—
Soap liniment	1	—
Snuff	1	—
Thermogene Rub	1	—
Toothache tincture	1	—
Tincture of Iodine	6	1
Tartaric acid	8	—
Toilet lanoline	1	—
Tin oxide tablets	2	—
Tonic Yeast tablets	1	—
Vitamin Iron tablets	1	—
Vitamin pellets	2	—
Vitamin Yeast tablets	1	—
Vitamin C. limes	1	—
Varicose lotion	1	—
Veganin tablets	1	—
Vitaminised iron and tonic tablets with yeast	1	—
Vitamin tablets and capsules	4	—
Vitathone	1	—
Worm chocolate	6	—
Worm syrup	1	—
White precipitate ointment	5	—
Wheat germ oil	1	—
Witch hazel	3	—
Yeast tablets	11	—
Zinc and castor oil cream	1	—
Zinc ointment	8	—
Total of Drugs	586	8
Total of Foods and Milks	3,442	165
Total	4,028	173

Table 3—Percentage Adulteration Over 7 years (Bristol Only)

	1953	1954	1955	1956	1957	1958	1959
Total number of samples	2,750	2,750	3,179	3,012	4,868	3,917	4 028
Milks per cent adulterated	4·67	8·53	5·52	8·48	6·0	5·64	13·61
Foods „ „ „	0·89	0·36	0·35	0·36	0·33	0·34	0·76
Drugs „ „ „	1·18	2·42	0·77	2·99	1·2	1·8	1·36
Total „ „ „	1·64	2·65	1·26	2·81	2·0	1·87	4·29

Table 4—Average Composition of Genuine Milks for 1959

Bristol

<i>Month</i>	<i>No. of samples</i>	<i>Fat % average</i>	<i>Non-fatty solids % average</i>
January	101	4·14	8·53
February	94	3·75	8·68
March	112	3·82	8·69
April	106	3·82	8·79
May	41	3·72	8·94
June	58	3·90	8·86
July	76	4·05	8·80
August	60	3·89	8·69
September	85	3·92	8·75
October	62	3·92	8·79
November	38	4·11	8·76
December	98	3·63	8·75
Total	931	3·88	8·73

Gloucester County

January	55	3·97	8·61
February	76	3·70	8·61
March	69	3·69	8·62
April	32	3·48	8·73
May	43	3·58	8·76
June	77	3·62	8·81
July	60	3·89	8·56
August	58	3·57	8·60
September	61	3·93	8·76
October	36	3·88	8·53
November	72	3·81	8·68
December	58	4·08	8·89
Total	697	3·77	8·68

Gloucester City

January	15	4·10	8·60
September	10	3·69	8·46
June	2	3·15	8·99
Total	27	3·65	8·68

Table 5—Adulterated Milks and Action Taken

No.	Milk	Commodity	Formal or Informal	Nature of Deficiency or Irregularity	Action taken
V. 42			Formal	3.0% added water	Repeat samples taken being V.55—60 incl.
V. 55	"		Informal	4.9% added water	
V. 57	"		"	3.0% "	Faulty heater at the plant discovered and rectified.
V. 58	"		"	5.3% "	Repeat samples were satisfactory.
V. 59	"		"	3.0% "	
V. 60	"		"	4.1% "	
V. 70	"		"	3.5% "	Repeat samples taken being V.92—96 incl.
V. 74	"	(Channel Island)	"	2.4% "	Repeat samples taken being V.100—109 incl.
V. 77	"	"	"	4.7% "	
V. 92	"		Formal	5.9% "	
V. 93	"		"	4.7% "	Evidence submitted to Town Clerk for the institution of legal proceedings against the producer.
V. 94	"		"	8.2% "	
V. 95	"		"	7.1% "	
V. 96	"		"	9.4% "	
V. 100	"	(Channel Island)	"	4.7% "	
V. 103	"	"	"	8.2% "	
V. 104	"	"	"	5.9% "	
V. 105	"		"	2.4% "	Evidence submitted to Town Clerk for the institution of legal proceedings against the producer.
V. 107	"		"	13.5% "	
V. 108	"		"	5.0% "	
V. 109	"		"	9.4% "	
V. 129	"	(Channel Island)	"	12.5% deficient in fat	Repeat samples taken were satisfactory.
V. 131	"	"	"	3.7% "	
X. 28	"	"	Informal	3.5% added water	Repeat samples taken being X.35 and 36.
X. 29	"	"	"	9.4% added water and 23.3% deficient in fat	
X. 30	"		"	7.1% "	Repeat samples taken being X.32 and 33
X. 31	"		"	14.1% "	
X. 32	"		Formal	17.0% added water	Milk Marketing Board had no Contract with producer so no action could be taken by this Department.
X. 33	"		"	13.0% "	Repeat samples taken were satisfactory.
X. 35	"	(Channel Island)	Formal	1.8% added water	
X. 36	"	"	"	1.8% "	
X. 62	"		Informal	26.5% "	
X. 63	"		"	15.3% "	
X. 64	"		"	8.8% "	
X. 66	"		"	23.3% deficient in fat	
X. 75	"		"	23.5% added water	
X. 76	"		"	7.6% "	
X. 77	"		"	6.5% "	

Table 5—continued

No.	Commodity	Formal or Informal	Nature of Deficiency or Irregularity		Action taken
			Formal	Informal	
V. 210	(Channel Island)	"	13.7% deficient in fat	"	Formal repeat samples taken V.248-V.253.
V. 213	"	"	8.7%	"	Letter sent to producer.
V. 219	"	"	16.6%	"	Repeat sample taken was satisfactory.
V. 240	(Channel Island)	"	17.5%	"	Reported to Town Clerk for the institution of legal proceedings.
V. 249	"	Formal	20.0%	"	Case withdrawn by Prosecution Counsel.
V. 252	"	"	21.2%	"	Copy of Analyst's Certificate sent to producer.
V. 254	"	Informal	10.0%	"	Formal repeat sample was satisfactory.
V. 255	(Channel Island)	"	5.0%	"	Copy of Analyst's Certificate to producer.
V. 286	"	"	12.5%	"	Repeat samples taken were satisfactory.
W. 24	"	"	5.0%	"	Letter sent to producer and to Milk Production Officer, Gloucester.
W. 25	"	"	7.5%	"	Formal repeat sample taken—Z.67.
X. 158	(Channel Island)	"	20.0%	"	Reported to Town Clerk for the institution of legal proceedings.
X. 159	"	"	16.2%	"	Letter sent to producer.
Z. 62	"	"	18.3%	"	Repeat sample was satisfactory.
Z. 67	"	Formal	10.0%	"	"
Z. 78	(Channel Island)	Informal	12.5%	"	Repeat samples were satisfactory on bulking.
Z. 107	"	"	8.3%	"	Repeat sample was satisfactory on bulking.
V. 301	(Channel Island)	"	11.2%	"	Letter sent to the producer.
V. 304	"	"	5.0%	"	Repeat sample was satisfactory.
V. 306	"	"	5.0%	"	"
V. 314	"	"	5.0%	"	"
W. 57	"	"	11.2%	"	"
W. 58	"	"	22.5%	"	"
W. 61	"	"	10.0%	"	"
W. 74	"	"	7.5%	"	"
Z. 106	"	"	5.0%	"	"
V. 441	Milk	"	10% deficient in fat and abnormal N.F.S.	"	"
X. 236	"	"	5% deficient in fat	"	"
X. 254-258	"	"	Bulk fat deficiency	"	"
X. 260-265	"	"	"	"	"
X. 266-274	"	Formal	"	"	"
X. 276	"	"	"	"	"
X. 279	"	"	"	"	"
X. 281-295	"	"	"	"	"

"Appeal to cow" samples genuine but abnormal in fat.

Letter sent to Regional Milk Officer, Min. of Ag; Fish; and Food. Producer advised of our action.

Table 6—Action Taken on Unsatisfactory Reports

No.	Commodity	Formal or Informal		Nature of Deficiency or Irregularity	Action taken
		Formal	Informal		
VD. 62	Soda Water			95.0% deficient in sodium bicarbonate	Senior Food Inspector accompanied Public Analyst to the manufacturing Company who were advised to make a more extensive agitation of the liquid in the tanks to distribute more evenly throughout load the sodium bicarbonate which is added thereto. Copy of Public Analyst's Certificate and letter to blenders
WD. 83	Butter	Formal		18.3% water	Remaining stocks destroyed.
YD. 9	Parrish's Food	Informal		22.0% deficient in Iron phosphate	Remaining stocks destroyed.
YD. 11	Ammoniated Tincture of Quinine	"		52.0% deficient in ammonia	Remaining stocks destroyed.
VD. 16	Corned Beef	"		Poor quality. Lead 13 p.p.m.	Repeat samples taken being 50-52 incl. Letter to Manufacturer.
VD. 24	Beef Sausages	"		Poor quality. Meat 45%	
VD. 50	Corned Beef	"		Poor quality. Lead 10 to 15 p.p.m.	Shop Managers (two branches involved) asked to withdraw stocks from sale.
VD. 51	"	"		" " 11 to 18 p.p.m.	
VD. 52	"	"		" " 30 to 33 p.p.m.	
VD. 53	"	"		" " 6 to 22 p.p.m.	
WD. 20	Pork Sausages	"		Poor quality. Meat 62%	Recommended standards only. No action.
XD. 13	Processed Cheese	"		Poor quality. Water 47%	No standard but letter sent to the Manufacturers which resulted in their changing the designation of these products to "cheese spread."
XD. 15	"	"		" " 49%	Powder condemned as being unfit for human consumption.
XD. 39	"	"		" " 48.7%	Fruit to be thoroughly washed; not unfit for human consumption.
ZD. 36	Soup Powder	"		Very slightly infested	
ZD. 46	Dried Apricots	"		Poor quality	
ZD. 54	Sultanas	"		Webbing and debris from insect infestation.	
ZD. 64	Malt Vinegar	"		Out of condition. Some sedimentation	End of barrel; stock exhausted.
YD. 92	Imitation Glycerin	"		Out of condition	Stock to be destroyed.
YD. 36	Indigestion Tablets	"		Deficient in certain of the constituents. Methods of analysis considered in consultation with Manufacturers.	Public Analyst consulted Manufacturers. No action taken by F. & D. Authority.
YD. 82	"	"		"	
YD. 90	"	"		"	
WD. 92	Butter	"		16.5% water	
WD. 93	"	"		16.7% "	
WD. 94	"	"		16.6% "	
WD. 96	"	"		16.5% "	
VD. 227	Pork Sausages	"		Only 55.0% meat.	Repeat sample taken was satisfactory.
		"		Poor quality	Letter to Manufacturer giving "accepted standards" for sausages.
VD. 258	Junket Powder	"		Contained one pellet of rodent excreta	Chief Public Health Inspector of the Manufacturers' area was advised by letter and the factory subsequently was inspected. Quite satisfactory conditions were found.

Table 6—continued

No.	Commodity	Formal or Informal	Nature of Deficiency or Irregularity	Action taken
VD. 359	Wafer Biscuits	Informal	Mouldy and out of condition	Stock destroyed.
WD. 108	Pork Sausages	"	Only 60 per cent meat. Poor quality	Repeat samples were satisfactory.
YD. 239	Diabetic Chocolate Mould	"	Labelling stated "no added starch". Cocoa starch was present.	
YD. 289	Glauber's Salt	"	Outside B.P. requirements in respect of water	Retailers were informed and stocks were either withdrawn from sale or destroyed altogether. Question of packaging is to be taken by the retailers concerned with Manufacturer.
YD. 290	Glauber's Salt	"	Both samples had effloresced.	Letter to retailer who will take up matter with the Manufacturer.
YD. 297	Smelling Salts	"	Practically devoid of ammonia stated to contain 15%. Only 0.4% found.	Repeat sample was satisfactory.
ZD. 192	Tomato Juice	"	Poor quality, tin content equivalent to 330 p.p.m.	
YD. 327	Phenolated Solution of Iodine	"	Poor quality. Article badly compounded. Deficient in iodine; contained excess potassium iodide by declared composition.	Letter to retailer asking for his observations.
WD. 273	Malt Vinegar	"	13.7% deficient in acetic acid.	Repeat sample was satisfactory.
YD. 355	Sal Volatile	"	77.0% deficient in ammonia; 43% deficient in ammon. carb.	Branch Manager is to draw General Manager's attention to these deficiencies.
YD. 380	"	"	23.0% deficient in ammonia	
ZD. 278	Devon Cream Slice	"	No evidence of butterfat. Designation should be "Imitation cream slice"	Letter to manufacturer regarding designation.
ZD. 325	Corned Beef	"	Lead 6.5 p.p.m. Tin 370 p.p.m.	Remaining stock in shop condemned by P.H.I.
ZD. 345	Steak Pie	"	No evidence of butterfat; stated to contain 50.0% butter in pastry.	Formal repeat samples taken. Reported for legal proceedings.
WD. 241	Prunes	"	Infested	Repeat sample unobtainable.
WD. 252	Canned Grapefruit Segments	"	Excessive tin at 315 p.p.m.	Letter and copies of Analyst's Certificates to Branch Manager
WD. 259	"	"	Tin at 260 p.p.m.	Bakery Manager warned. Appropriate card to be kept displayed.
VD. 607	Cream Sponge	"	"Cream" contained no butterfat	Stock destroyed.
VD. 689	Almonds	"	Stale and off flavour. Both faults suggest adverse storage conditions.	Repeat samples taken were unsatisfactory. Vendors advised and stocks withdrawn.
VD. 616	Peach Liqueur	"	Poor Quality } Low alcohol compared	
VD. 622	Bardinet	"	" } with declared content.	
VD. 629	Cherry Rocher	"	"	Stock condemned.
WD. 286	Anchovy Essence	"	Old stock. Poor quality.	Remainder of stock considered to be sound.
WD. 290	Cochineal	"	Poor condition and unfit for use as colouring food preparation.	
WD. 291	Banana Flavouring	"	In poor condition	Stock condemned.
WD. 298	Cayenne Pepper	"	Infested	"
WD. 307	Split peas	"	"	"

Table 6—continued

<i>No.</i>	<i>Commodity</i>	<i>Formal or Informal</i>	<i>Nature of Deficiency or Irregularity</i>	<i>Action taken</i>
WD. 310	Macaroni	Informal	Infested	Stock condemned.
WD. 315	Pickling Spice	"	"	"
WD. 318	Currants	"	"	"
WD. 495	Italian Apples	"	Excess of lead	Repeat samples were unobtainable.
WD. 497	Italian Apples	"	Arsenic 0.6 p.p.m. Lead 10.0 p.p.m.	
XD. 403	Marzipan	"	Excess of lead	Repeat sample unobtainable.
XD. 343	Pork Sausage	"	Arsenic 0.3 p.p.m. Lead 8.0 p.p.m.	Butcher advised re standard.
XD. 376	Semolina	"	Some fermentation of sugar; not fit for human consumption.	Stock condemned.
XD. 386	Pepper	"	62% meat, poor quality	Remainder of stock to be used for specified purposes only.
XD. 439	Ruskit Sausage Filler	"	Infested	Discussed with manufacturers.
XD. 440	Sterilised Seasoning	"	Damp and lumpy due to long storage	Reported to Chief Public Health Inspector. No further stocks available.
XD. 488	Apples	"	Contained no preservative	Proprietor warned by letter.
XD. 520	"	"	Contained 1.92% of Sulphur dioxide	
XD. 507	Bread and Butter	Formal	Excess of arsenic and lead	
YD. 455	Spirit of Sal Volatile	Informal	"	
YD. 457	"	"	Contained 10 parts of "butter spread" for each 100 parts of bread. No evidence of butterfat.	Letter to Chemist in each instance.
YD. 462	"	"	21.0% deficient in ammonia	
YD. 460	"	"	20.0% " " "	
YD. 538	Cold and Influenza Mixture	"	20.0% " " "	Chemist supplied formula for further investigation by Public Analyst.
ZD. 401	Steak Pie	"	31.0% " " "	Formal Repeat sample taken (See ZD.427).
ZD. 420	Salmon & Shrimp paste	"	Old stock and out of condition	Technical problem which Public Analyst may take up with manufacturers. Eventually not proceeded with.
ZD. 427	Steak Pie	Formal	Pastry declared to contain butter. No butterfat found.	Legal proceedings taken.
ZD. 482	Bread and Butter	"	Poor quality	Proprietors warned by Town Clerk.
ZD. 487	Dried Peas	Informal	Contained 27% fat. No butterfat present.	
ZD. 499	Beef Suet	"	Contained 6 parts of "Butter Spread" for each 100 parts of bread. Fat in the butter spread portion contained not more than 35 per cent w/w of butterfat. Slightly infested	Bulk of stock fit for consumption.
			Poor quality due to long storage	To be used for cooking purposes only.

Details of Legal Action Taken

<i>Case</i>	<i>Legal Action</i>
Bread containing a portion of a cigarette	Reasonable doubt as to ownership. Case dismissed
Milk containing 5.9 per cent added water	Warning letter to producers from Town Clerk
Tapioca containing rat excreta	Fined £5 and £2 2s. costs.
Selling of loaf of bread containing a nail	Fined £5 and £2 2s. costs.
Selling milk containing added water	Fined £10 and £2 2s. costs.
Selling potatoes unfit for human consumption ..	Fined £2.
Selling a "Layers Mash" without a Statutory Statement	Fined £1
Selling milk containing added water	Fined £10.
Selling milk deficient in milk fat	Fined £5 and £1 Advocate's fee
Selling Channel Island milk deficient in fat	Case withdrawn.
Selling a loaf containing mould	Fined £5 with £2 2s. costs.
Selling a cake containing a nail	Fined £5
Selling steak pies alleged to contain 50% butterfat; none found	Fined £10.
Dirty bottle of milk	Case unproved and dismissed.
Advertising "bread and butter" to public, only 35% was butterfat.	Warning letter sent by Town Clerk.

Summary of Milk Analyses

	<i>1st qtr.</i>	<i>2nd qtr.</i>	<i>3rd qtr.</i>	<i>4th qtr.</i>	<i>Total</i>
Fat deficient (ordinary milk)	7	6	11	26	50
Added water (ordinary milk)	26	—	—	—	26
Abnormal solids—not-fat (all milks)	20	7	9	7	43
Poor quality. (Fat just less than 3.0 per cent) ..	2	2	5	2	11
Channel Island satisfactory	71	72	96	43	282
Channel Island deficient in fat	5	28	27	4	64
Channel Island added water	5	—	—	—	5
Channel Island poor quality (fat just less than 4.0 per cent) ..	2	5	2	1	10
Channel Island (abnormal solids—not-fat)	—	—	—	—	Nil
Total Milks	354	239	259	228	1,080
Formal Milks	45	22	21	46	134
Added water and fat deficient	2	—	—	—	2
Appeal-to-cow	2	2	—	15	19

The Sale of Milk Regulations 1939, require milk to contain not less than 3.0 per cent of milk fat and not less than 8.5 per cent of solids-not-fat. Of 719 ordinary milks examined, 76 failed to satisfy the statutory requirements, 50 being fat deficient, and 26 containing added water. A further 43 showed abnormal solids-not-fat, but no evidence of watering.

The Milk & Dairies (Channel Islands and South Devon Milk) Regulations of 1956 require Channel Islands milks to contain not less than 4.0 per cent of milk fat. Of 361 "quality" milks examined 64 were deficient in fat, 5 contained added water and 10 were of poor quality in respect of fat. This undesirable state of affairs for a quality milk seems little better than in 1958 although this time the deficiencies are related to fats and there was no occasion to record solids-not-fat figures less than 8.5 per cent.

PART II. FERTILISERS AND FEEDING STUFFS ACT

Table 7—Summary of Samples Examined

				<i>Formal</i>	<i>Informal</i>	<i>Comment or Irregular</i>
Bristol—						
Feeding Stuffs	..	..	..	17	18	5
Fertilisers	..	..	..	28	73	24
Avonmouth						
Feeding Stuffs	..	..	..	122	—	11
				<hr/> 167	<hr/> 91	<hr/> 40
				<hr/>	<hr/>	<hr/>

The following Feeding Stuffs submitted from Avonmouth required adverse comment.

- 31.A. Laymix Winter Mash.
Contained only 34·5 per cent protein instead of the declared 45 per cent.
- 37.A. Chick Rearing Flakes.
Protein low and outside limits of variation 13·8 per cent against a declared 16·0 per cent.
- 69.A. Livestock Concentrate.
Fibre in excess and outside the limits of variation. 6·0 per cent against a declared 3·5 per cent.
- 73.A. Poultry Food No. 1.
Oil slightly high. 3·85 per cent against a declared 3·0 per cent.
- 74.A. Poultry Balancer Meal.
Oil slightly high 4·05 per cent against a declared 3·0 per cent.
- 76.A. Pig Fattening Nuts.
Protein high. 15·2 per cent against a declared 13·0 per cent.
- 77.A. Livestock Concentrate.
Oil high at 3·5 per cent against a declared 2·5 per cent. Fibre high at 4·8 per cent against a declared 3·5 per cent.
- 90.A. No. 1 Pig Nuts.
Protein low at 14·1 per cent against a declared 17·0 per cent.

A number of fertilisers which required comment are excluded from the following list of City samples which required adverse comment. Samples so excluded were such that the discrepancies in composition could not be regarded as to the prejudice of the purchaser.

Table 8

3	Dahlia fertiliser	No statutory statement	Letter to Vendor re statutory statement.
7	Autumn turf dressing	Soluble phosphate slightly low. Insoluble phosphates outside statutory limits of variation	Copy of Certificate and letter to Vendor.
8	Rose fertiliser	Insoluble phosphate just outside statutory limit of variation	Copy of Certificate to Vendor but slight excess is not to prejudice of purchaser.
13	Layers mash	No statutory statement	Referred to Town Clerk.
18	Sulphate of ammonia	Nitrogen just outside statutory limits of variation	Copy of Certificate and letter to Vendor.
26	Super phosphate of lime	Wrong labelling of commodity	Repeat sample taken.
31	Fish Guano Compound	Potash outside statutory limits of variation	Copy of Certificate to Vendor. The excess of Potash is not to prejudice of purchaser.
33	General mixture	Nitrogen, insoluble phosphate figures are in excess and are outside upper limits of variation	Letter and copy of Agricultural Analyst's Certificate to Manufacturers.
35	Super phosphate of lime	Soluble phosphate in excess of statutory limit of variation	Not to prejudice of purchaser.
36	Growmore fertiliser	Potash is in excess and outside the statutory limit of variation	Not to prejudice of purchaser
45	Potato manure	No statutory provided	Copy of Agricultural Analyst's Certificate sent to Retailer.
49	Bone meal	Nitrogen low, phosphate high and outside the statutory limits or variation. Product should be qualified as Grade II	Certificate and letter sent to Manufacturers.
68	Bone meal	Nitrogen at 5.8% was in excess	
78	General fertiliser	The total phosphoric acid at 7.3% was in excess	Letter and copy of Analyst's certificate sent to vendor.
82	General mixture	Nitrogen at 4.25% was in excess	Excessive phosphoric acid not regarded as being of prejudice to the purchaser.
100	Lawn fertiliser	No statutory statement provided	Copy of Analyst's certificate sent to Manufacturers; excess not to prejudice of purchaser.
111	Layers mash	" "	Letter to manufacturers. Manufacture discontinued.
115	Free Range Growers Mash	Oil low at 2.8% "	Letter to Vendor; repeat sample taken.
121	Growmore Fertiliser	Soluble phosphate low at 6.2%	Letter and copy of Analyst's Certificate to Vendor.
135	Bone meal	Nitrogen low at 4.1% Insoluble phosphate phosphate high at 23.0%	Repeat sample to be taken.
			Repeat sample to be taken.
			Letter and copy of Analyst's Certificate to Vendor.
			Repeat sample to be taken.

PART III—WATER AND SEWAGE ANALYSES

Table 9—Bristol

City water from tap at Canynge Hall	..	..	..	..	26
City water from pumping station, Knowle	..	..	..	..	12
Downend and Frenchay Hospital	..	..	..	..	24
Seepage, sewage effluents and streams	..	..	..	..	32
Ships in port	..	..	..	..	8
City mains supply (Houses, hydrants etc.)	..	..	..	..	16
Council House (heating system)	..	..	..	..	12
Swimming Baths	..	..	..	..	120
Miscellaneous	..	..	..	..	2
					<hr/> 252

Twelve samples of mains water were unsatisfactory either bacteriologically or chemically. There was only a trace of dissolved oxygen found in the Council House water. The sulphite figure ranged from 4·7 p.p.m. to 19·8 p.p.m.

Table 10

No. of samples	<i>Bristol Supply</i>		<i>West Gloucester Supply</i>	
	<i>Tap at Canynge Hall</i>	<i>Tap at Jubilee Rd., Knowle</i>	<i>Tap at Downend</i>	<i>Tap at Frenchay</i>
	26	12	12	12
	<i>Parts per million</i>			
Total solids	202-317	135-164	203-422	181-414
Chlorine as chloride	12-16	9-16	15-49	13-47
Total hardness	154-248	68-96	108-256	122-258
Permanent hardness	30-56	37-60	23-48	17-54

Because of the admixture of various types of waters now delivered to the City it is only possible to indicate the range of variation noted at the four sampling points throughout the year.

Table 11—Gloucester (County)

Wells	..	..	..	..	20
Mains supplies (public and private)	..	..	..	..	44
Sewage and trade effluents	..	..	..	..	22
Streams etc.	..	..	..	..	10
Seepage	..	..	..	..	2
Swimming pools and baths	..	..	..	..	22
					<hr/> 120

Sixty-four samples of drinking water were submitted. Forty were satisfactory, the remainder showed evidence of contamination or pollution as the result of chemical or bacteriological tests.

Table 12—Gloucester (City)

Drinking water	..	..	..	..	..	..	3
Seepage	..	..	..	..	..	..	2
							<hr/> 5

Chlorination Report

General

Owing to the exceptional weather, the efforts of the chlorination staff this year have acquired a news value previously quite unknown.

After starting up all plant in the usual manner in June, by mid-July it became evident that an all-out effort would be required to control river septicity if the weather held.

From the end of July until early October every available man and piece of equipment was working at top pressure, and some stations ran the whole time without ever shutting down.

The minimum staff coverage at night and week-ends was two experienced men on duty plus a van and driver to provide mobility, liaison, and for simple inspection duties.

The total consumption was over 200 tons of liquid chlorine.

Sewer Treatment

The original practice of treating all major sewage flows before outfall to the river has been continued wherever possible. Engineering work and sewer collapse have precluded treatment at times.

The aim of sewer treatment is to keep the fresh sewage from septic tendency for as long as possible after it has mixed with "old stock" in the river.

There are now no booster stations operating, and about one-third of the total consumption of chlorine is used in sewer stations.

River Treatment

The Ashton Bridge plant was started in the last week of June. As the summer progressed, river conditions in the neighbourhood of the treatment point were kept fairly good. However, with diminishing fresh water flow, long sections of the river became septic. At times conditions were particularly offensive above Bathurst Basin, and also below the Suspension Bridge, depending upon weather and local conditions.

At this time the Coronation Road sewage had to be pumped into the river near Bedminster Bridge owing to the sewer collapse which closed the road for several weeks. A temporary station was erected, and within four days of the decision to build it, chlorine solution was flowing through the suspended pipes to the river and this attracted much publicity.

Although the capacity of this Bedminster Bridge station was rather inadequate, due to the impossibility of getting enough water under pressure, much good work was done and some measure of control of odour nuisance was achieved. Local residents and some staff and patients of the General Hospital paid some kind compliments to the men concerned. However, the margin was rather fine between under treatment with consequent sewage smells, and over treatment with the consequent unpleasant but harmless chlorinous smells. This temporary station was manned, continuously and was operating without a break from August 7th to October 16th, except for running repairs which usually seemed to call the Officer from his bed!

On August 8th, the main supply pump at Ashton Bridge failed with a broken shaft. In view of previous trouble of the same nature, an urgent order was sent out for a new pump, the vital need being to get the station operating again as soon as possible. A new pump and motor, from Leeds and London respectively were obtained, fitted and started up on August 25th.

During late September there was some intermittent delayed reaction between the river water and the applied chlorine solution, causing clouds of

white vapour to rise. This was undoubtedly due to the presence of some concentrated trade discharge, but it was of such irregular occurrence that all efforts to trace its source were unsuccessful.

Proposed Extension

Having regard to river conditions this season, various additions to the scheme have been investigated. The extension which gives most promise of success with reasonable economy is to rebuild the Cattle Market Road station, making it into a river treatment point. This will involve installing a pump for high pressure water from the harbour, a chlorine vaporiser, and using six of the standard sewer chlorinators. Chlorine solution will be delivered to the river through suspended pipes.

This additional treatment point should do much to reduce odour nuisance in the area, although it cannot help at Bath Bridge on the flood tide as this would involve a third station near Bedminster Bridge.

Supplementary duties

The Chlorination Officer and staff are also responsible for various additional activities as follows:—

1. The regular treatment of the water in all Parks Department paddling pools. .
2. The erection and operation of any sewage treatment plant, as occasioned by mishap, repair work etc. This can also include the de-gassing of a foul sewer, and the supply of fresh air if required.
3. Continuous treatment of the stream at Stockwood Lane to minimise the effects of pollution from the adjoining refuse tip.
4. Maintenance of the sewage pumping plant at Lawrence Weston.
5. Separation and disposal of oil from trade waste, and disposal of dangerous substances unsuitable for refuse tips.
6. Assisting in any emergency for which a call is made, and where the special knowledge, experience and equipment which has been obtained can be put to good use.

The Officer is also involved in various trade waste, atmospheric pollution corrosion, and water treatment problems, both in Bristol and in Gloucester County.

PART IV. RAG FLOCK ACT

Thirty-three samples taken informally were examined as prescribed in the 1913 Regulations together with microscopical examination for the type of fibre involved. This was essential in order to determine whether or not the chloride limit test applied. In all cases where this standard was applicable it was found that the samples did in fact comply.

There is no change to report in the circumstances relative to the examination of Rag Flock and other fillings Materials Regulations 1951. It is possible with the advent of newer fillings of the foam rubber type that some of the older filling materials will fall into disuse with consequent less need for legislation to deal with the problem. No revision of the 1951 legislation appears to be contemplated and certain unsatisfactory features of the Act thus remain.

Furthermore there is no improvement in the accommodation problem at Canynge Hall, and there is little likelihood of setting up the organisation to deal properly with Rag Flock problems.

PART V. PHARMACY AND POISONS ACT

The thirty-three articles submitted under this Act were mainly for household use. Each will be briefly considered with elaboration where desirable.

P. and P.1 Kettle Scale Remover.—Contained 62 per cent w/v of formic acid and as such is subject to the provisions of Statutory Instrument No. 1016 operative from 1st July 1958.

P. and P.2 Sanitary Fluid.—Contained 19 per cent v/v of phenols against a declared 16 to 19 per cent. The sample was satisfactory and correctly labelled.

P. and P.3 Durazone.—Contained 6 per cent w/v of available chlorine and as such is free from restriction on sale.

P. and P.4 Carbolic acid.—Contained 24.7 per cent of compounds calculated as phenols and as such is a Part II poison. The phenol content should be stated otherwise the labelling is satisfactory. The article might usefully be better named as a Coal Tar Disinfectant.

P. and P.5 Super Qual-Disinfectant.—Contained 10.1 per cent of compounds calculated as phenols and as such is a Part II poison. The label should carry the word POISON prominently displayed in a frame. Various exaggerated claims were noted such as extra strong, super quality and highly concentrated. None seemed justifiable on a 10 per cent strength.

P. and P.6 Sanitary fluid.—Contained 9.9 per cent w/v of formaldehyde against a declared 10 per cent. The sample was satisfactory and correctly labelled.

P. and P.7 Disinfecting Fluid.—Contained 12.9 per cent v/v of phenols against a declared 12 to 15 per cent. The sample was satisfactory and correctly labelled.

P. and P.8 Formaldehyde Soil Sterilizer.—Contained 35.7 per cent v/v of formaldehyde against a declared 38 per cent. The sample was satisfactory and correctly labelled.

P. and P.9 Warfarin Mouse Bait.—Comment on the use of Warfarin baits was made in the Report for 1958. The compound, alpha acetonyl benzene—4 hydroxycoumarin, is extremely toxic but the Rat Repression Officer rightly indicated that it is used in extremely high dilution in the actual baits, and even in the master mix used by his staff, the amount of the poison is very small. The poison is most effective in rodent control and has in this City largely replaced older rodenticides such as zinc phosphide. Control appears to rest in the high dilution of the Warfarin and the non-availability of the pure chemical.

P. and P.10 Ammonia.—Contained 4.3 per cent w/w of ammonia and as such is free from restriction on its sale. The product was correctly labelled.

P. and P.11 Cloudy Ammonia.—Contained 11.2 per cent w/w of ammonia against a declared 10 per cent and as such is a Part II poison. The Poison Rules exempt this type of preparation from the requirement of name and address of seller on the label where the article is retailed in the container as packed by the manufacturer.

P. and P.12 Washing Solution.—A detergent solution similar to "Teepol" and as such free from restriction on sale.

P. and P.13 Slug Killer.—Contained metaldehyde. Such slug baits are free from poison restrictions.

P. and P.14 Weed Killer (non arsenical).—Contained not more than 49 per cent v/v of phenols against a declared 55 to 58 per cent v/v. This product was

sampled in 1955 and 1956 and was then of the same order, that is distinctly below the declaration.

P. and P.15 Rust Remover—Contained 40 per cent w/v of phosphoric acid with traces of an organic solvent added to lower surface tension and increase the penetration properties of the acid. Phosphoric acid and its preparations are free from restriction on sale.

P. and P.16 Slug Killer—Contained metaldehyde. Such slug baits are free from restriction on sale.

P. and P.17 Disinfectant—A pine oil based preparation and as such is free from statutory restriction on its sale.

P. and P.18 Disinfectant—A solution of a perfume in isopropylalcohol. As such it is free from restriction on sale although its efficiency as a disinfectant is doubtful.

P. and P.19 Slug and Snail Killer—Contained metaldehyde. Such baits are free from restriction on sale.

P. and P.20 Ant Killer—The active ingredient was shown to be of the Piperonyl Butoxide type of insecticide contained in a syrup of 66 per cent sucrose. There is no restriction on the sale of this preparation.

P. and P.21 Selective Weed Killer for Lawns—Contained 2-4 dichlorophenoxyacetic acid and as such is free from restriction on sale. The labelling detail seemed adequate.

P. and P.22 Liquid Nicotine Insecticide—Contained nicotine equivalent to 4.6 per cent w/w and as such is a 1st Schedule Part II Poison requiring amongst labelling provisions the name and address of the seller which had not been done on this sample.

P. and P.23 Nicotine Spray—Contained 17.5 per cent w/v of nicotine against a declared 20 per cent w/v. This can be regarded as satisfactory. The labelling of the preparation was adequate.

P. and P.24 Nicotine Spray—Contained 20 per cent w/v of nicotine which was in fact the declared amount. The labelling of the preparation was adequate.

P. and P.25 Liquid Nicotine Insecticide—Contained 4.7 per cent w/w of nicotine against a declared 4.0 per cent w/w. This can be regarded as satisfactory. The labelling of the preparation was adequate.

P. and P.26 Weed Killer—Contained 53 per cent v/v of phenols against a declared 55 to 58 per cent v/v. The slight deficiency is not of serious consequence. The labelling of the preparation was satisfactory.

P. and P.27 Disinfectant—Contained 15 per cent v/v of phenols against a declared 10 to 16 per cent v/v. The sample was satisfactory. The address of the seller was reasonably clear but the name was not legible. The practice of rubbing stamping the labels of such preparations is not a particularly satisfactory method.

P. and P.28 Fumigating Shreds—Contained 4.2 per cent w/w of nicotine against a declared 15 per cent w/w. Whilst the labelling was satisfactory the preparation appeared to be old stock but there was some delay in examining the article and some loss of nicotine may have occurred. Further sampling was advised.

P. and P.29 Scale Remover—Contained 38.6 per cent w/v of acetic acid. This concentration would be effective as a scale remover. The labelling was satisfactory although it might be desirable to give more prominence to the

cautionary note relating to contact with the skin. Preparations of acetic acid and phosphoric acid would appear to be replacing those of formic acid presumably to avoid statutory obligations. See P. and P.1.

P. and P.30 Cloudy Ammonia—Contained 9.5 per cent w/w of ammonia against 10 per cent as declared. This was satisfactory and the labelling was adequate.

P. and P.31 Ammonia—Contained 14.5 per cent w/w of ammonia against a declared 15 per cent w/w. This was satisfactory and the labelling was adequate.

P. and P.32 Disinfectant—Contained 15 per cent v/v of phenols against a declared 10 to 16 per cent. This was satisfactory and the labelling was correct.

P. and P.33 Lysol Disinfectant—Contained 46 per cent v/v of cresols against B.P. requirements of 47 to 53 per cent v/v. Whilst slightly below the required strength this is not of serious consequence. The labelling was satisfactory.

PART VI. MISCELLANEOUS ANALYSES

Table 13

General

1.	City of Bristol	..	..	..	..	..	..	121
2.	Biochemical and toxicological	..	..	..	..	..	..	36
3.	Foreign bodies, insects and infestation	..	..	..	..	..	..	50
4.	Gloucester County	..	..	..	..	..	..	99
5.	Gloucester City	..	..	..	..	..	..	1
6.	Zinc and Fluorine—atmospheric pollution (Avonmouth)	..	..	..	..	..	..	24
	Sulphur dioxide (Myrtle Road area)	..	..	..	..	..	..	18

Bristol Corporation Departments

7.	Central Purchasing and Town Clerk	..	..	..	..	..	..	15
8.	City Engineer	..	..	..	..	..	..	81
9.	Port Health Office	..	..	..	..	..	..	886
10.	City Architect	..	..	..	..	..	..	1
11.	Transport and Cleansing	..	..	..	..	..	..	3
12.	Housing	..	..	..	..	..	..	2
13.	Public Health Inspectors' samples	..	..	..	..	..	..	33
14.	Rat Repression Officer	..	..	..	..	..	..	1
15.	City Valuer	..	..	..	..	..	..	2
16.	Health	..	..	..	..	..	..	2
17.	Education	..	..	..	..	..	..	21
18.	Fire Brigade	..	..	..	..	..	..	1
19.	Port of Bristol	..	..	..	..	..	..	8

University Departments

20.	Bacteriology	..	..	..	..	..	..	7
21.	Pathology	..	..	..	..	..	..	2

1,414

1—City and County of Bristol

The 121 specimens from various sources were in character with previous years and again a few of the more interesting are selected for comment.

Some chocolates were found to contain crystals of ferrous ammonium sulphate. The chocolates had been sent through the post and the matter was reported to the police who eventually resolved the problem between sender and recipient.

A tea infusion was found to froth readily. The complainant was probably concerned that his tea unexpectedly resembled his beer. The "frothing" was due probably to residual detergent in the teapot.

A specimen of a waxed brown paper intended for use in contact with foods was found to be free from formaldehyde and phenol. Certain types of paper used in fish boxes have apparently been shown to contain traces of formaldehyde. Fish in contact with the paper have likewise shown traces of this compound which technically could be interpreted as a contravention of the Preservative Regulations. This type of "contravention" would warrant serious considerations of *de minimis* provisions in future legislation—a matter which was discussed at some length in the Food Standards Committee Report on Preservative in Food issued later in the year.

A number of samples of mustard held in a school kitchen in the City were examined for deterioration. It was noted in particular that the moisture content was critical. Thus a figure of 5.8 per cent gave a satisfactory mustard but two samples of 8.4 and 9.7 per cent moisture were quite unfit.

The Department is infrequently called upon to identify weeds for the purposes of the Noxious Weeds Legislation. Three specimens so submitted were identified as Spear Thistle, Creeping Thistle and Oxford Ragwort.

A number of dried milk powders were examined during the year. The lack of condition was usually poor solubility coupled with high free acidity. It is noted for example that if the acidity is higher than 1.6 per cent expressed as lactic acid, then the milk powder will taste sour. One or two powders were actually rancid and quite unfit.

A shirt and some leaves were examined as a result of a complaint that both had suffered spray damage. The black spots on shirt and leaves were identified as fly excreta.

Several samples of grapefruit were passed for early disposal. The tin contents were of the order of 200 parts per million.

A portion of marrow was submitted with the complaint of very bitter taste which was regarded as due to natural causes probably accentuated by a long spell of dry weather whilst the marrow was growing.

Some toasted coconut squares were found unfit for consumption because of rancidity of the coconut.

A home-made elderberry wine was found to contain zinc equivalent to 62 parts per million. The dangers of using galvanised ware to prepare such products cannot be too frequently stressed.

A sample of white spirit, submitted on behalf of the Officer Commanding a nearby R.A.F. Station was found to be in compliance with the appropriate B.S. Specification.

2—*Biochemical and Toxicological*

The 36 specimens examined came mainly from Regional Hospitals and were chiefly blood and urine. There were also several specimens of hair, nails and urine examined for arsenic. A urine and a gastric aspirate in one case contained 1.5 and 0.5 parts per million of arsenic respectively. The "normal" figures of arsenic in urine are 0.008 to 0.150 p.p.m.

One urine specimen was specifically examined for calcium and found to contain 250 mgm. per 1,000 ml. Martindale, Vol. II 1955, page 314, quotes 100 to 300 mgm. per 24 hour specimen.

A check was made upon the accuracy of dispensing and keeping qualities of three solutions from one hospital. A solution of invert sugar was correct, a solution of urea had undergone some breakdown of urea, and a small quantity of fluid alleged to contain invert sugar was devoid of this substance.

Two blackcurrant syrups were compared for vitamin potency and advice given to the Hospital as to the more suitable product. This problem was hardly toxicological although could be classified as biochemical!

The liver and stomach contents of a spaniel dog were submitted with a request for an examination for Warfarin. It appears to us that in the absence of typical post-mortem signs of the ingestion of this compound there is little hope, or indeed, little point in searching for it. The request was then made for an examination for lead, arsenic and copper, all of which proved to be absent. The poor beast concerned was stated to be of a very inquisitive nature and had already lost an ear in a combine harvester. The reason for his demise remains a mystery.

3—Foreign Bodies in Foods etc. including Infestation and Identification of Insects

Table 14

Lab. No.	Article				Comment
M. 31	Flaked tapioca	..	..	..	Rodent excreta present
32	"	..	..	..
35	Part of slice of bread	..	..	..
60	Bread	..	..	..
61	Wrapped sliced loaf	..	..	..	Contained soiled dough and mineral oil
62	Skimmed milk powder	..	..	..	No red particles as alleged
64	Steak and kidney pie	..	..	..	Contained a small feather
136	Bread	..	..	..	Contained portions of charred dough
158	Slice of bread	..	..	..	Contained unrisen dough
159	Chocolate eclair and cream slice	..	..	..	Cream slice contained some butterfat. Only a small quantity of slice was available
160	Orange	..	..	..	Larvae of the house fly in the damaged portion of the peel
164	Slice of bread	..	..	..	Contained soiled dough
166	Bread	..	..	..	Contained a piece of charred string
167	Slices of a loaf	..	..	..	Contained soiled dough
221	Rolled oats	..	..	..	No evidence of infestation
281	Slice of bread	..	..	..	Brown flour in the mixture
292	Canned salmon	..	..	..	Crystals of struvite present
305	Mussels	..	..	..	"Tuft of hair" on the mussel was part of the gill with filaments attached
306	Insects	..	..	..	Identified as <i>ptinus tectus</i>
310A	Bread	..	..	..	Contained soiled dough
340	Bread	..	..	..	No evidence of chloros
341	Bread	..	..	..	Contained a stout piece of pink tinted paper which was part of the label from a flour sack
498	Bottle of milk	..	..	..	Contained dust and green mould growth
539	Tooth	..	..	..	Taken from canned pork meat and proved to be the molar tooth of a pig
555	Chocolate eclair	..	..	..	With extensive mould growth
564	Sliced wrapped loaf	..	..	..	Contained the head of a tack, probably inserted after slicing
565	Chocolate fruit and nuts	..	..	..	Heavily infested with <i>ptinus tectus</i>
593	Bun	..	..	..	Contained soiled dough
627	Bread	..	..	..	Contained soiled dough
630	Insect	..	..	..	Identified as the Australian carpet beetle
631	Insect	..	..	..	Identified as a female wood wasp
658	Butter	..	..	..	Contained mould growth
752	Iced cake	..	..	..	Contained a moth
778	Instant whip	..	..	..	Contained cotton wool
807	Biscuits	..	..	..	No infestation
812	Bread	..	..	..	Contained insect fragments
813	Flour	..	..	..	Contained a piece of bacon
822	Self raising flour	..	..	..	Contained webbing, excreta and one pupa
853	Chocolate cream buns	..	..	..	Contained <i>ephestia</i> moth

Table 14—continued

Lab. No.	Article				Comment
922	Vinegar	..	..	..	Heavily infested with vinegar eels
940	Meat pie	..	..	..	Contained a male earwig
959	Chocolate cream	..	..	..	Contained excreta and webbing of the flour moth
1013	Shredded wheat cubes	..	..	..	Contained <i>ptinus tectus</i>
1030	Chocolate cake	..	..	..	Contained <i>ephestia</i> moth
1083	Granary bread	..	..	..	Contained traces of paint
1184	Bread roll	..	..	..	No infestation
1219	Slices of bread	..	..	..	Contained soiled dough
1220	Pie	..	..	..	Contained charred pastry fragments
1366	Frozen vegetables	..	..	..	Contained a ground beetle
1368	Bottle of milk	..	..	..	Contained graphitic grease

Most of the foregoing specimens were the result of complaints received by the Food Inspectorate from members of the public. Where action was necessary a warning letter or a visit by a public health inspector usually sufficed. In a few cases only was it necessary to institute proceedings.

4—Gloucester County

Ninety-nine specimens were examined and these are tabulated in the report to the County authority. The specimens included 59 soils and sub-soil waters and 10 breads.

5—Gloucester City

One specimen only was submitted. This was a sample of dirt from a water tank. This consisted of general debris with no evidence of potato peelings as alleged.

6—Atmospheric Pollution

The survey on two sites in the Avonmouth area for zinc and fluorine continued throughout the year. The rainfall collected at Avonmouth Dock and Barracks Lane is not used in the conventional manner as prescribed by the D.S.I.R. but is examined for total zinc and fluorine compounds. The range of depositions for the years 1957, 1958 and 1959 are compared.

		Avonmouth Dock		
		1957	1958	1959
Zinc in tons/sq. mile	..	0.04 to 0.55	0.014 to 0.39	0.06 to 0.47
Fluorine in tons/sq. mile		0.03 to 0.14	Nil to 0.25	0.04 to 0.28
Total rainfall in inches		28.9	33.1	32.0
		Barracks Lane		
		1957	1958	1959
Zinc in tons/sq. mile		*0.006 to 0.05	0.01 to 0.05	0.01 to 0.05
Fluorine in tons/sq. mile		*0.008 to 0.03	Nil to 0.04	0.01 to 0.03
Total rainfall in inches		29.4	30.0	29.8
* for eight months only				

A survey of the area of Myrtle Road and Southwell Street was started in January to assess the degree of sulphur pollution in the area which might arise from the operation of the District Heating Scheme of the University and Hospital Board. The average sulphur pollution over 9 months of survey was—

Myrtle Road 1	0.70	mgm SO ₃ per 100 sq. cm/day
Myrtle Road 2	0.90	„ „ „
Southwell Street	0.75	„ „ „

These figures are about the level of conditions in the area of the Zoological Gardens.

7—Town Clerk and Central Purchasing Departments

The fifteen items examined for conformity with specifications included washing powder, vinegars, scouring powders, wax polish, soup powder and liquid soaps. All these products complied with the requirements laid down.

8—City Engineer's Department

The majority of the 81 specimens submitted were soils or sub-soil waters from areas where construction work was planned. Such soils and waters are examined primarily for sulphates and pH value in relation to possible attack on cement work. Other items include detergents, flyash, deposit from a drain, and several samples of water from the Northern Storm Water Interceptor Tunnel.

9—Port Health

The tempo of sampling at the Port increased considerably this year, nearly 900 samples were examined and these constituted over 70 per cent of all miscellaneous examinations. Inspection at the Port, followed where necessary by chemical and bacteriological examinations, affords a generally satisfactory and adequate cover for imported goods. But there is one aspect which may well assume greater importance in the future and which I feel, at the moment, is not receiving the attention it deserves. As in 1958 the "monitoring" of canned fish in particular received attention but the facilities of the laboratory are strictly limited and different techniques and specialised apparatus would be necessary to deal with this problem adequately. Central Government authority seems to consider all is well and that local authorities need not concern themselves with such matters, but in this area, at least, with considerable tonnages of foods entering the Port annually I am not aware of any sampling arrangements by any Government department for the purposes of "monitoring" imported foods. It seems that only random sampling of home produced foods has been considered necessary. At the moment there seems also little hope of improving this unsatisfactory situation, but I am very certain of one thing and that is should something "go wrong" in any of the Port areas, it will be the local analytical service which will initially, at least, be expected to sort out the problem.

The bulk of the samples submitted for chemical and bacteriological examinations were canned goods from all parts of the world. Metallic contamination of canned goods by tin and lead was of a low order and very little food required condemnation for excesses of tin and lead.

Cereal products including sago and tapioca were the subject of regular examinations for infestation and attack by rodents, and it is gratifying to report little, if any, trouble from these causes.

Canned glacé cherries were found in poor condition and in a state of fermentation.

Canned tomato products continue to be the worst offenders in respect of high tin contents, whilst some baked beans were also condemned because of excessive tin coupled with significant lead figures. Canned pineapple chunks were similarly high in tin content.

A corned beef was found to contain 91 per cent of meat and 9 per cent of cereal and would warrant the description of corned beef with cereal.

Citrus fruits were found to be in compliance with regulations relating to diphenyl and orthophenyl-phenol.

Gherkins were found to contain benzoic acid of the order of 200 parts per million. Whilst gherkins are not specifically mentioned in the Preservative Regulations it is not unreasonable to include them in the category of pickles

and sauces which are permitted to contain a maximum of 250 parts of benzoic acid per million.

A sample of sweet red peppers contained 4.5 per cent of total solids and 0.33 per cent of vitamin C on the dry weight.

Two samples of cockles in vinegar which had been returned to this Country from Canada as being not acceptable were found to contain significant amounts of sand 0.33 gm. and 0.20 gm. respectively. It is apparently extremely difficult to ensure that cockles and similar products are completely free from sand after processing. Indeed, such products have a reputation of being "gritty" to taste. It is therefore difficult to prescribe any limiting amount for sand and all that can be said is that the amounts in this case might be regarded as undue. It would be possible to avoid ingestion of the sand because it had all settled on the bottom of the jars.

Samples of corned beef continue to cause difficulty in the assessment of overall lead content. Erratic lead figures have been obtained throughout the mass of the tinned meat because of the difficulties in ensuring homogenous samples for analysis. Lead figures of the order of 10 p.p.m. and more have been recorded on portions of meat at the can ends.

Two Australian wines were compared in respect of iron contents. One a Sauterne shipped in a metal drum contained 5 p.p.m. of iron, and a second in a lined polythene drum contained 0.7 p.p.m. At the time of the examination the wine with the higher iron figure was not astringent in taste but was likely to become so if stored very much longer in such a container.

A routine sample of stewed steak submitted in mid-October eventually became "front page" news, caused questions to be asked in the House and nearly provoked an international "incident". This "Stewed Steak" was labelled as containing Beef and Salt only, but was found to consist of beans, tongue, liver, kidney and a large amount of gristle, skin and artery, with numerous hairs and bristles. There was some steak but certainly insufficient to warrant the labelling. The contents suggested that the animal went in whole at one end of the processing and was eventually "canned" at the other with a few beans thrown in for good measure. That this sample should have been selected from some 20,000 cans is somewhat remarkable. Eventually it was ascertained that there were 132 cans of a similar code mark and that the meat was intended for native consumption in the country of origin.

"Mr. Wilkins (Lab. Bristol South) asked the Minister of State for Commonwealth Relations, in the Commons, whether he had studied the information sent to him by the honourable Member for Bristol South concerning the landing at Bristol of stewed steak imported from the Union of South Africa and found by the Medical Officer of Health to be of exceptionally poor quality; and, in view of the fact that the consignment was intended for sale to the native population of the Union, what records he had of similar imports into the High Commission territories of South Africa.

Mr. Wilkins also asked the Minister what safeguards he lays down to ensure that foodstuffs imported into the High Commission territories of South Africa for consumption by the native population are not inferior in standards and quality to those which would be permitted to enter the United Kingdom.

Mr. C. J. M. Alport, in a written reply, stated: "There is no import control over goods imports into the High Commission territories from the Union of South Africa. It is accordingly not known whether any of the canned stewed steak in question has been sent to any of the three territories. But no complaints in connection with this matter have reached the authorities in any of the High Commission territories.

There are regulations in each territory under the public health laws which forbid the sale or offer for sale of foodstuffs unfit for human consumption."

A second "incident" which caused the laboratory a very considerable amount of work concerned Lebanese apples which were found to contain excessive amounts of both arsenic and lead. Every effort was made to assist in the possible salvaging of the apples but the acid washing techniques proved laborious, costly, and above all, did not ensure even then that the fruit would meet the standards set down i.e. arsenic not more than 1 p.p.m. per million and lead not more than 2 p.p.m.

Whilst it is agreed that one would have to eat something of the order of 40 pounds of apples before reaching anything like a toxic amount of arsenic, we have nevertheless in this country Arsenic in Food Regulations limiting the arsenic content of foods and we have recommendations concerning lead. I found it necessary to comment in the local press to this effect and I concluded my remarks thus "The whole purpose of such legislation is to keep the intake of arsenic and lead from all sources of food at the lowest practicable level consistent with all this implies in the preparation, handling and distribution of foodstuffs."

Almeria grapes from Spain were found to have a visible deposition on the surface of the fruit. Various insectidal residues were suspected but the deposit was, in fact, due to flowers of sulphur. This is probably a technical infringement of the preservative regulations but if so it is an innocuous addition. In connection with the sampling of these grapes the Inspector encountered some opposition. The vendor suggested that if the sample was required the Inspector would have to purchase the whole barrel. The contention being that once opened the whole barrel of grapes would have to be sold quickly. Subsequently the obstruction charge was not upheld by the local court.

Finally, late in December a number of samples of Irish potatoes came under suspicion of having been treated with mercury compounds. No detectable quantity of mercury was found in the specimens examined.

10—City Architect Department

11—Transport and Cleansing Department

12—Housing Department

14—Rat Repression Officer's Department

15—City Valuer's Department

16—Health Department

Specimens from the above mentioned Departments included lead piping, deposit from a radiator, effluents from public conveniences, fungus from a wooden floor, insects, acetone and a dust.

A rat bait submitted by the Rat Repression Officer consisted of calcium sulphate, sodium oxalate, sugar and pepper corns.

The City Valuer submitted paint films for an opinion on the number of coats of paint used and also a portion of the embellishment of the roof of the Lord Mayor's Chapel for advice on renovation.

13—District Public Health Inspectors' Samples

The 33 specimens included insects and foodstuffs of various types. The various insects were identified as the crane fly, larvae of cloths moth, larder beetle, house fly, unidentified garden beetles, the nymphal stage of a parasitic tick, *ptinus tectus*, harvest mite, fly larvae of stiletto fly, *tribolium*, the swift louse fly—a bird parasite, and one fresh water crustacean, *Isotoma aquatilis* which occasionally occurs in public supplies but is quite harmless.

A number of jars of Virol were examined for contamination with chloros. No evidence of this was found but the jars had undergone very lengthy storage and were in poor condition.

A beef steak was examined for presence of disinfectant without success.

A gripe water was found to be in close agreement with the formula supplied and was considered unlikely to have caused illness.

Several tins of grapefruit showed tin contents varying from 140 to 190 p.p.m. Some showed signs of imminent blowing and it seemed that the consignment warranted prompt disposal.

A sample of seepage water contained among other elements silver and titanium in solution to the extent of some 10 p.p.m. The seepage thus appeared to implicate two types of works nearby.

A sample of sultanas was infested with the Mediterranean Flour Moth.

Shelled almond nuts showed signs of infestation.

Grapes were found to have been dusted with flowers of sulphur, a matter referred to in the consideration of Port Health Samples.

A pie contained a foreign body which was shown to be rodent excreta.

A can of vegetable soup was found to contain imperfect insects thought to be *Stegobium paniceum*.

A sponge cake contained foreign matter which was demonstrated to be rodent excreta.

17—Education Department

The 21 specimens submitted were mainly "contract" goods and included comparisons of floor sealing compounds, sweeping preparations, germicides and washing powders.

18—Fire Service Department

The Department submitted a specimen taken from the roof of a parked car which it had been alleged was sprayed by one of the fire appliances. This could not be supported as the material proved to be very similar to the product sold as Polyclens.

19—Port of Bristol

The eight samples requiring examination included a comparison of three skin cleansers, a tar mixture, a sludge, an effluent and two cements.

20 and 21—University Departments

The Departments of Pathology and Bacteriology together submitted nine specimens which included lung tissue, a fluid, urine, insects, a foreign body in flour, pickle solutions, some mussels, and a spinal injection fluid.

PART VII. REPORT ON WORK FOR THE COUNTY OF GLOUCESTER

This is the eighth annual report on the analytical services provided for the County in accordance with the agreement of 1951. That agreement concerned mainly the examination of Milk, Food and Drugs, Waters, Fertilisers and Feeding Stuffs, but has extended to problems of Atmospheric Pollution, Chlorination and Miscellaneous Analyses for the County and for Urban and Rural Districts.

Table 15—Summary of Examinations

	<i>March</i>	<i>June</i>	<i>September</i>	<i>December</i>	<i>Total</i>
Milk	209	181	186	174	750
Food and drugs	147	140	126	123	536
Waters and swimming baths	10	27	40	43	120
Fertilisers and feeding stuffs	18	18	19	18	73
Miscellaneous	12	54	22	10	98
Merchandise Marks Act ..	—	—	—	1	1
	<hr/> 396	<hr/> 420	<hr/> 393	<hr/> 369	<hr/> 1,578
Spectrophotometric analysis	—	—	16	8	24
Chlorination visit and inspections	—	—	10	1	11
Pharmacy and Poisons Act ..	3	2	1	—	6
Atmospheric pollution—					
Lead peroxide	21	21	21	21	84
Deposit gauges	21	21	21	20	83
	<hr/> 45	<hr/> 44	<hr/> 69	<hr/> 50	<hr/> 208
Totals	<hr/> 441	<hr/> 464	<hr/> 462	<hr/> 419	<hr/> 1,786

Table 16—Adulterated Samples

<i>Food and Drugs Act</i>			<i>Whether formal or Informal</i>	<i>Nature of Adulteration or Irregularity</i>
<i>Serial No.</i>	<i>Article</i>			
A. 2522	Milk	..	Informal	23.5% added water
A. 2545	"	..	Formal	5.9% " "
B. 2715	"	..	Informal	10.6% " "
B. 2720	"	..	"	13.3% deficient in fat
B. 2728	"	..	Formal	28.8% added water
B. 2733	"	..	Informal	5% deficient in fat
B. 2743	"	..	"	8.8% deficient in fat and abnormal N.F.S. at 8.35%
B. 2758	"	..	"	6.6% deficient in fat
C. 2748	"	..	"	10% " "
A. 2597	"	..	"	5% " "
A. 2598	"	..	"	6.6% " "
A. 2600	"	..	"	10.0% " "
A. 2601	"	..	"	10.0% " "
A. 2602	"	..	"	5.0% " "
A. 2605	"	..	"	25.0% " "
A. 2606	"	..	"	13.3% " "
(Bulk fat A.2604 to A.2606 was 2.9%)				
A. 2618	Milk	..	Informal	Suspicious. S.N.F. 8.4%, freezing point depression 0.529°C.

Table 16—continued

<i>Food and Drugs Act Serial No.</i>	<i>Article</i>	<i>Whether formal or Informal</i>	<i>Nature of Adulteration or irregularity</i>
A. 2620	Milk (Channel Island)	Informal	12.5% deficient in fat
A. 2628	" " " "	"	8.3% " "
	(Bulk fat A.2624 to A.2631 was 3.26%)		
A. 2632	Milk	Informal	6.6% deficient in fat
A. 2633	"	"	6.6% " "
A. 2635	"	"	16.7% " "
A. 2637	"	"	13.3% " "
	(Bulk fat A.2635 to A.2638 was 3.15%)		
A. 2643	Milk	Informal	8.3% " "
A. 2644	"	"	6.6% " "
A. 2645	"	"	13.3% " "
A. 2646	"	"	18.3% " "
A. 2647	"	"	10.0% " "
A. 2648	"	"	8.3% " "
	(Bulk fat A.2643 to A.2653 was 3.22%)		
B. 2817	Milk	Informal	20% " "
B. 2823	"	"	10% " "
B. 2851	"	Formal	18.3% " "
B. 2852	"	"	11.6% " "
B. 2853	"	"	11.6% " "
	(Bulk fat B.2849 to B.2853 was 3.15%)		
B. 2887	Milk	Informal	6.6% " "
B. 2890	"	"	6.6% " "
C. 2781	"	Formal	10.0% " "
	(Bulk fat C.2774 to C.2782 was 3.17%)		
C. 2811	Milk	Formal	20% " "
C. 2862	Milk (Channel Island)	Informal	7.5% " "
B. 2937	"	"	10% " "
C. 2873	"	"	8.3% " "
C. 2905	"	Formal	16.7% " "
A. 2674	" (Channel Island)	Informal	20% " "
	(Bulk fat A.2672—2675 was 4.25%)		
A. 2677	Milk (Channel Island)	Informal	12.5% " "
	(Bulk fat A.2676—A.2678 was 4.6%)		
A. 2763	Milk (Channel Island)	Informal	10% deficient in fat
A. 2766	Milk	Informal	3.7% " "
	(Bulk fat A.2763 to A.2766 was 4.3%)		
A. 2802	Milk	Informal	6.6% " "
	(Bulk fat A.2799 to A.2802 was 3.3%)		
A. 2850	Milk	Informal	8.3% deficient in fat
	(Bulk fat A.2850 to A.2852 was 3.2%)		
B. 3018	Milk	Formal	25% deficient in fat and abnormal solids—not-fat 8.05%
B. 3021	Milk	"	6.5% added water
B. 3027	Milk	"	3.5% " "
B. 3028	Milk	"	8.2% " "
B. 3068	Milk	Informal	11.7% deficient in fat and abnormal solids—not-fat 8.35%
A. 2880	Milk (Channel Island)	"	10% deficient in fat
	(Bulk fat A.2879 to A.2883 was 4.7%)		
C. 2738	Vinegar	Informal	A non-brewed condiment with not more than 5% malt vinegar
C. 2920	Ice Cream	"	26% deficient in fat

Table 17—Summary of Milk Analyses

	March	June	September	December	Total
Fat deficient	5	27	3	4	39
Added water	4	—	—	3	7
Abnormal solids—not-fat ..	38	5	13	21	77
Poor quality fat. Just less than 3.0%	—	9	1	1	11
Suspicious. Low S.N.F. and freezing point depression less than 0.530 C	—	1	—	1	2
Channel Island satisfactory ..	28	15	30	23	96
Channel Island unsatisfactory ..	—	2	4	1	7
Channel Island, poor quality i.c. fat less than 4.0%	—	1	—	—	1
Channel Island (Abnormal S.N.F.) ..	—	—	1	—	1
Total milks	209	181	186	174	750
Formal samples	42	65	43	52	202
M.M.B. contract	2	3	2	3	10
M.M.B. contract. Poor quality ..	—	—	—	—	—
M.M.B. contract. S.N.F. abnormal ..	—	—	1	—	1
Appeal to cow	—	7	—	11	18

Thus of 750 milks examined, 77 were abnormal in respect of solids-not-fat, that is they gave figures below 8.5 per cent but the freezing point depression did not indicate added water. Of the 96 Channel Island milks examined 7 were deficient in fat, one was of poor quality and one abnormal in respect of solids-not-fat.

Other Foods and Drugs requiring Comment

C. 2698—Crabmeat	Informal	Alleged fragments of glass were in fact naturally occurring crystals of struvite.
A. 2588—Fish paste, salmon and anchovy	„	Poor quality. Only 65 per cent of total fish.
A. 2663—Soft drink (with foreign body)	„	Foreign matter consisted of glass fragment weighing approximately 50 milligrams.
B. 2799—Curry powder	„	Sample was in a very mouldy state.
C. 2809—Foreign body in Bottle of milk	„	Foreign body was a small black slug.
C. 2829—Dairy Ice cream	„	Contained 5.9 per cent total fat of which half was milk fat.
C. 2835—Dairy ice cream	„	Contained 11.6 per cent total fat of which not more than 0.5 per cent was milk fat.
A. 2671—Foreign body in bread	„	The foreign body was a wire nail.
A. 2757—Lamb chops (Frozen food)	„	This sample was submitted at the end of a test period of weighing. As received it was unfit for human consumption.
C. 2938—Scampi	„	Chemically and Bacteriologically satisfactory.
C. 2943—Fillets of smoked haddock	„	
C. 2944—Small Plaice fillets	„	
C. 2950—Bread and cheese roll with foreign body	„	
A. 2783—Flour of cooked chestnuts	„	The foreign body was a one inch portion of a match stick with the burnt end visible.
A. 2832—Wire in sweet	„	This sample showed evidence of insect infestation, identified as the larva of the Ephestia moth, probably <i>E. kuehniella</i> . Regarded as unfit for human consumption.
C. 2997—Ice cream	Formal	The foreign body was identified as a stout piece of wire approximately $\frac{3}{4}$ " long and $\frac{1}{16}$ " diameter. It may have been derived from a wire cooling rack. Satisfactory

Table 18—Waters Effluents, etc.

Wells	..	..	..	..	..	20
Mains supplies (Public and private)	..	..	..	..	..	44
Sewage and trade effluent		..	..	..	..	22
Streams etc.	..	..	..	..	..	10
Seepage	..	..	..	..	..	2
Swimming pools and baths	..	..	..	..	..	22
						<hr/> 120

Sixty-four samples of drinking water were submitted. Forty were satisfactory, the remainder showed evidence of contamination or pollution as the result of chemical or bacteriological tests.

Table 19—Pharmacy and Poisons Act.

The six samples examined were reported as follows:—

P. & P.	9	Thawscale kettle fur descaler	..	..	..	Labelling unsatisfactory. Old stock.
	10	Caustic soda	..	..	..	Of satisfactory composition and correct labelling.
	11	Veterinary ointment	..			Coal tar in an emollient base and free from restriction on sale.
	12	Ovenspray	..	..		Contained 20 per cent w/v of sodium hydroxide and requires cautionary note in terms of the Statutory requirements.
	13	Legwash powder	..			Each packet contained 73 per cent Lead acetate. Labelling was satisfactory but comment was made on conditions relating to the breaking of bulk for retail sale.
	14	Sanitary fluid	..	..		This product contained 34.7 per cent w/w of formaldehyde against a declared 30 per cent. The labelling and closure of the container were both satisfactory.

Fertilisers and Feeding Stuffs Act

	<i>Formal</i>	<i>Informal</i>	<i>Requiring Comment</i>
Fertilisers	2	17	1
Feeding stuffs	38	16	7

Comment was required on—

No.877—Sow and Weaner Balancer Meal, was seriously deficient in protein.

No. 878—Sow and Weaner Balancer Meal, a repeat of the source of No. 877 was just outside the limits of variation for protein at 34 per cent (limits 36 to 44 per cent).

No. 918—Poultry Mixture, was not a feeding stuff within the meaning of the Regulations and hence required no statutory statement.

No. 926—Milk Equivalent was somewhat high in fibre, but the amount of fibre declared at 0.5 per cent was so small that the 1.0 per cent found whilst in excess of the permitted limit was really of little consequence.

No. 883—Lawn Fertiliser was somewhat high in soluble phosphate but the small excess cannot be regarded as to the prejudice of the purchaser.

No. 738—Intensive Layers Mash, contained 6·2 per cent of fibre. Limits of variation prescribed as 2·35 to 5·3 per cent.

No. 739—Pig Fattening, contained 6·6 per cent of fibre. Limits of variation prescribed as 2·45 to 5·5 per cent.

No. 740—Sow and Weaner Meal, contained 5.9 per cent of fibre. Limits of variation prescribed as 2.3 to 5.2 per cent.

Table 20—Miscellaneous Samples—including Atmospheric Pollution Examinations

Atmospheric pollution—							
Lead peroxide	..	..	..	..	..	..	84
Deposit gauges	..	..	..	..	..	..	83
Material from canned salmon	..	..	..	..	..	..	1
Milks	..	..	..	..	..	..	11
Soils and Sub-soil waters	..	..	..	..	..	..	59
Channel Island Milks	..	..	..	..	..	..	3
Bread	..	..	..	..	..	..	10
Insects in bread	..	..	..	..	..	..	1
Lemonade	..	..	..	..	..	..	2
Cooking Oil	..	..	..	..	..	..	1
Bottle with deposit	..	..	..	..	..	..	1
Ice lolly	..	..	..	..	..	..	2
Steak	..	..	..	..	..	..	1
Swimming bath water	..	..	..	..	..	..	1
Insects	..	..	..	..	..	..	1
Apples	..	..	..	..	..	..	1
Cochineal	..	..	..	..	..	..	1
Icing	..	..	..	..	..	..	1
Tea infusion	..	..	..	..	..	..	1
							265

Table 21**Foods**

<i>Nature of sample</i>							<i>Total examined</i>	<i>Number adulterated or otherwise irregular</i>
Milk	..	..	..	..	..	..	750	54
Arrowroot	..	..	..	..	..	..	1	—
Apples	..	..	..	..	..	..	2	—
Ales and Beers	..	..	..	..	..	..	5	—
Almond paste	..	..	..	..	..	..	1	—
Butter	..	..	..	..	..	..	8	—
Blancmange powder	..	..	..	..	..	..	1	—
Baking powder	..	..	..	..	..	..	4	—
Bread	..	..	..	..	..	..	1	—
Bread and cheese roll	..	..	..	..	..	..	1	—
Butter beans	..	..	..	..	..	..	1	—
Batter mix	..	..	..	..	..	..	1	—
Baked beans in tomato sauce	..	..	..	..	..	..	1	—
Blackcurrant and apple pie	..	..	..	..	..	..	1	—
Cocoa	..	..	..	..	..	..	1	—
Condensed and evaporated milk	..	..	..	..	..	..	9	—
Candied peel	..	..	..	..	..	..	1	—
Cake and sponge mixture	..	..	..	..	..	..	1	—
Cakes	..	..	..	..	..	..	2	—
Christmas pudding	..	..	..	..	..	..	1	—
Compound fat	..	..	..	..	..	..	1	—
Cream of Tartar	..	..	..	..	..	..	1	—
Canned fruit	..	..	..	..	..	..	9	—
Canned soup	..	..	..	..	..	..	12	—
Canned meat	..	..	..	..	..	..	6	—
Canned fish	..	..	..	..	..	..	9	—
Canned vegetables	..	..	..	..	..	..	12	—
Canned tomatoes	..	..	..	..	..	..	5	—
Coffee and chicory essence	..	..	..	..	..	..	2	—
Coffee Instant	..	..	..	..	..	..	1	—
Cider	..	..	..	..	..	..	1	—
Cheese products	..	..	..	..	..	..	22	—
Custard powder	..	..	..	..	..	..	2	—
Cream	..	..	..	..	..	..	12	—
Creamed spaghetti	..	..	..	..	..	..	1	—

Table 21—continued

<i>Nature of sample</i>	<i>Total examined</i>	<i>Number Adulterated or otherwise irregular</i>
Canned rice pudding	1	—
Caraway seeds	2	—
Curry powder	3	—
Colouring and flavouring	6	—
Cornflour	2	—
Cornflour, flavoured	1	—
Dripping	7	—
Dried fruit	8	—
Egg rusks	1	—
Frozen foods	22	—
Flour	3	—
Fresh fruit	4	—
Flour of cooked chestnuts	1	—
Farina	1	—
Fish cake	1	—
Fish dressing	1	—
Golden raising powder	2	—
Gravy browning	1	—
Ground nutmeg	3	—
Ground cinnamon	3	—
Ground almonds	4	—
Glaze fruits	5	—
Gelozone Vegetable Product	1	—
Ham dressing	1	—
Ice cream	20	1
Instant Potato Powder	1	—
Instant Pudding	1	—
Ice lolly	1	—
Jelly cubes and crystals	9	—
Lard	2	—
Lemonade powder and crystals	7	—
Lemonade bottle with foreign body	1	—
Margarine	3	—
Meat products	15	—
Mint in vinegar and jelly	4	—
Mixed spice	6	—
Mustard	2	—
Milk (with foreign body)	1	—
Milk shake cordial	1	—
Marzipan	8	—
Mixed herbs	1	—
Meat and fish paste	19	—
Non-alcoholic raisin flavour	1	—
Onion sauce powder	1	—
Oatmeal	1	—
Onion salt	1	—
Oranges	1	—
Preserves	27	—
Pickles	2	—
Peanut butter	1	—
Pearl barley	1	—
Pea flour	1	—
Pepper	6	—
Procea bread	1	—
Rice pudding	1	—
Rice flour	1	—
Sauce	2	—
Salad cream	4	—
Savoury straw	1	—
Salt	1	—
Sandwich spread	1	—
Sausages	13	—
Sausage seasoning	1	—

Table 21—continued

<i>Nature of sample</i>	<i>Total examined</i>	<i>Number adulterated or otherwise irregular</i>
Sweet, wire in	1	—
Sweets	10	—
Starch reduced bread	1	—
Suet	4	—
Stuffing	6	—
Soft drinks	22	—
Slimcea loaf	1	—
Spirits	10	—
Tea	20	—
Vegetarian gravy powder	1	—
Vinegar and non-brewed condiment	4	1
Veal curry	1	—
Wheatmeal loaf	1	—
Whipped cream	1	—
Wholemeal loaf	1	—
Walnut spread	1	—
Yoghourt	2	—
Yeastless Ruskit	1	—
Total	1,233	56
Drugs		
Aspirin tablets	7	—
Bronchial mixture	1	—
Bronchial cough mixture	1	—
Bronchial catarrh syrup	1	—
Bicarbonate of soda	3	—
Cough linctus	1	—
Cough essence	1	—
Cough balsam	1	—
Cream of Magnesia	1	—
Cod liver oil capsules	2	—
Camphorated oil	1	—
Codeine tablets	1	—
Epsom Salts	1	—
Gee's Linctus	1	—
Glycerine B.P.	1	—
Glucose tablets and lollies	2	—
Glauber's Salts	2	—
Halibut Liver Oil Capsules	3	—
Liquid paraffin	3	—
Lung tonic	1	—
Liver salt	1	—
Herbal pieces	1	—
Multivite Pellets	1	—
Medicated lozenges	1	—
Olive oil	2	—
Peppermint lozenges	1	—
Petroleum jelly	1	—
Powdered borax	1	—
Syrup of Figs	3	—
Sulphur tablets	1	—
Saccharin tablets	1	—
Vitamin mineral capsules	1	—
Vitamin pellets	1	—
Rinstead Pellets	1	—
Total of drugs	52	—
Total of foods and milk	1,233	56
Total	1,285	56

PART VIII. REPORT ON THE WORK FOR THE CITY AND
COUNTY OF GLOUCESTER

Table 22—Summary of Examinations

Milk	32
Food and drugs	38
Waters	5
Miscellaneous	1
Atmospheric pollution—	
Lead peroxide	24
Deposit gauges	24
	<hr/>
	124
	<hr/>

Table 23—Food and Drugs

Foods	<i>Total examined</i>	<i>No. irregular</i>
Milk	32	4
Bacon	1	—
Chicken patties	1	—
Chicken croquettes	1	—
Fish cakes	3	—
Flavoured milk	2	—
Ground cinnamon	1	—
Ground nutmeg	1	—
Ice cream	6	—
Jam and cream sponge	1	1
Lobster fish paste	1	—
Meat paste, chicken	1	—
Margarine	2	—
Milk powder	1	1
Nut cheese	1	—
Natural lemon juice	1	—
Pepper	1	—
Rendered fat	1	—
Self raising flour	3	—
Strawberry jam	1	—
Salmon canned	2	—
Sausages	3	1
Tomato Ketchup	1	—
Drugs		
Patent medicine	1	1
Strength tablets	1	—
Total	<hr/> 70	<hr/> 8

Comment was made on the following:—

The bacon and rendered fat were submitted as a result of complaint of illness after their consumption. The bacon fat was satisfactory and the rendered fat was free from common metallic poisons and was only slightly rancid.

1834	Patent medicine	..	Formal	Comment on the exaggerated claims made on the label.
1837A	Strength tablets	..	Informal	Comment on the composition and efficacy of the preparations.
1843A	Milk powder ..	..	..	Free from rancidity and infestation but shown to be a skim milk product.
1851A	Chum Salmon	..	..	} The least valuable of the Pacific Salmon.
1852A	Keta Salmon ..	..	..
1864	Chicken pattie	..	Formal	This sample contained 25 per cent of filling. The filling consisted of 66% chicken meat which would give approximately 17 per cent of chicken meat in the pattie. In the absence of any standard for this type of article I would suggest that 25 per cent chicken meat in the pattie was not unreasonable, although obviously the amount of chicken in such a product must depend very much on the price.
1866A	Jam and Cream Sponge	Informal		
	The "Cream" filling in this sponge contained no butterfat. Sec. 47 of the <i>Food and Drugs Act 1955</i> would require that such a sponge be designated as a jam and imitation cream sponge.			

Adulterated Samples

1808	Channel Island Milk	Formal	25 per cent deficient in fat.
1827	Milk T.T.	Informal	40 per cent deficient in fat and with abnormal solids—not-fat at 8·15 per cent.
1830	Milk T.T.	Formal	15 per cent deficient in fat and with abnormal solids—not-fat at 8·3 per cent.
1831	Milk T.T. .. ..	..	16·7 per cent deficient in fat and with abnormal solids—not-fat at 8·3 per cent.
1859	Pork sausages	.. ..	26 per cent deficient in meat based on a "standard" of 65 per cent meat for a pork sausage.

Of the remaining milks a further nine were deficient in solids—not-fat without evidence of watering, whilst three samples submitted as of Channel Island quality contained the requisite amount of fat.

Water and Sewage

G.C. 11	Seepage	.. ..	Probably sub-soil or spring water.
G. City 2	Cold tap	.. ..	} No detectable amounts of manganese, copper, lead iron or zinc.
.. 3	Hot tap .. ..	.. ..
.. 4	Boiled water	.. ..

Seepage in underground Boiler House. Evidence of sewage pollution.

Miscellaneous

M. 208	Dirt from water tank	..	General debris with no evidence of potato peelings as alleged.
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Atmospheric Pollution

Lead peroxide	24
Deposit gauges	24

PART IX. ATMOSPHERIC POLLUTION

Table 24

	<i>Bristol</i>	<i>Gloucester County</i>	<i>Gloucester City</i>
Lead peroxide	96	84	24
Deposit gauges	72	83	24
Zinc and fluorine	24	—	—
Smoke recordings, City	282	—	—
Smoke recordings, Port of Bristol Authority	718	—	—
	<hr/> 1,192 <hr/>	<hr/> 167 <hr/>	<hr/> 48 <hr/>

The total number of examinations for the year was 1407 or nearly 14 per cent of the work of the Department.

The City Survey

The five stations concerned in this survey are located at Marsh Street (City Centre), Shaftesbury Crusade (St. Philip's), the Zoological Gardens (roof of the elephant house), Blaise Castle (roof of the stables), and Wootton Road, St. Anne's (garden of a private house).

It is worthwhile to indicate how the degree of pollution is measured and in respect of the rain gauges, we have the D.S.I.R. approved apparatus which consists essentially of a glass collecting bowl of known area, which feeds the rainfall into a bottle of some 10 litres capacity. Very approximately a full bottle of 10 litres would represent some 5 inches of rainfall. Each apparatus is left for one month, and on or about the first of each month the rainfall is collected and a fresh 10-litre bottle placed in position. In all cases the bottle is contained in a lagged box to protect it during frost conditions. At periods of heavy rain it may be necessary to inspect each site at mid-month, or as dictated by weather conditions. Upon receipt at the laboratory, the collected rainfall is measured and examined for soluble, insoluble and tarry matters with estimations of calcium, chloride, sulphate and pH value. The Local Authority is a co-operating body of the D.S.I.R. in pollution surveys, and all results are submitted for correlation and assessment to the Officer-in-Charge, Warren Spring Laboratory, Riverway, Blackwell Lane, London, S.E.10.

The trends of the last six years can be seen from the following tables.

Table 25

<i>Deposit gauge</i>	<i>Total deposit in tons per sq. mile per year</i>					
	<i>1954</i>	<i>1955</i>	<i>1956</i>	<i>1957</i>	<i>1958</i>	<i>1959</i>
Waterworks	263	187	201	156	172	146
Shaftesbury Crusade ..	273	226	206	180	193	216
			(11 mths.)			
Zoological Gardens ..	143	126	101	105	101	114
			(11 mths.)		(11 mths.)	
Blaise Castle	124	103	110	93	108	115
			(11 mths.)			
St. Annes	—	—	—	156	188	152
					(11 mths.)	

The conditions at the City centre continue to improve and it is pleasing to record the lowest deposition, 146 tons, for the six years under review.

Conditions at Shaftesbury Crusade continue at the same level of about 200 tons per annum. Similarly the pollution levels at the Zoological Gardens

and Blaise Castle are steady at just over 100 tons per annum, a figure that is not likely to be bettered under present conditions.

At the St. Anne's site conditions are somewhat better than in 1958, but about the same as 1957

Table 26

<i>Rainfall</i>	<i>Total rainfall in inches</i>					
	1954	1955	1956	1957	1958	1959
Waterworks	41.4	23.7	25.7	27.2	34.5	27.6
Shaftesbury Crusade ..	38.7	22.5	24.1	28.1	34.4	29.4
Zoological Gardens ..	40.2	25.5	26.9	32.9	36.0	31.0
Blaise Castle	40.2	24.4	25.2	32.6	33.7	30.1
St. Annes	—	—	—	27.6	36.5	30.7

The rainfall figures are lower than in 1958 and are very similar to the 1957 figures. It is interesting to note that the deposition figures for 1957 are also very much of the same order as for 1959.

Table 27

<i>Sulphur Pollution</i>	<i>Average SO₃ mgms. per 100 sq. cm. per day</i>					
	1954	1955	1956	1957	1958	1959
Waterworks	1.94	3.0	2.03	2.24	2.06	1.34
Shaftesbury Crusade ..	2.29	2.75	2.07	2.40	2.04	1.37
Zoological Gardens ..	0.61	1.18	0.89	1.05	1.20	0.81
Blaise Castle	0.96	1.24	1.10	1.03	0.93	0.96
St. Anne's	—	—	—	1.17	1.00	0.77

The Blaise Castle sulphur pollution remains at the 1.0 level which it has done for the six years reviewed.

There is a note-worthy and gratifying fall in the sulphur pollution at the other four sites and with only one exception, the pollution is at its lowest since 1954.

In particular the pollution at the Waterworks and Shaftesbury Crusade and Zoological Gardens are down to something of the order of 60 per cent of the pollution of earlier years.

The pollution at St. Anne's has fallen steadily in the three years of observations.

Table 28

The data for the Kingswood area is similarly summarised

	1954	1955	1956	1957	1958	1959
Tons per sq. mile ..	183	116	109	78	88	100
Average SO ₃ mgm per 100 sq. cm. per day ..	0.94	1.82	1.24	1.02	0.89	0.8
Rainfall in inches ..	40.9	19.9	22.7	27.6	30.0	28.0

The total deposition is again somewhat higher than 1958 and 1957. The sulphur pollution has continued to fall steadily since 1955.

The Avonmouth Survey

The three sites in this area are at the Docks, Green Splot Farm and Barracks Lane.

Table 29

				<i>SO₃ mgms. per 100 sq. cm. per day</i>			
				1955	1956	1957	1958
Avonmouth Dock	..	..	..	3.60	3.22	3.12	1.95
Green Splot	..	..	..	1.16	1.21	1.81	1.18
* T. Farm	..	..	..	0.71	1.12	0.97	0.91

* After 1st April 1957 this site was changed to Barracks Lane.

The level of sulphur pollution at the Docks is just a little worse than the 1958 figure but is a great improvement on earlier years.

The Green Splot levels, are apart from the 1957 figure, fairly consistently at 1.2 mgms.

It is not easy to compare the old T. Farm site with the present Barracks Lane site, but certainly at the latter there is a continued improvement.

The rain gauges at Avonmouth Dock and Barracks Lane are not examined in the conventional manner but are used to assess the zinc and fluorine pollution in the area. No attempt is made to determine the actual form of these depositions and the data below gives the total zinc and its compounds, and the total fluorine and its compounds respectively.

Table 30

				<i>Tons per sq. mile</i>		
				1957	1958	1959
Avonmouth Dock						
Total zinc	..	..	..	2.13	1.82	3.14
Total fluorine	..	..	..	0.95	1.09	1.50
Rainfall in inches	..	..	..	28.9	33.1	32.0
Barracks Lane						
Total zinc	..	..	..	0.34	0.31	0.28
Total fluorine	..	..	..	0.31	0.19	0.22
Rainfall in inches	..	..	..	29.4	29.4	29.8

The picture presented for three years at Barracks Lane represents a stabilised and recurring pattern. At the Docks, however, the depositions of both zinc and fluorine show very definite increases and the highest figures for the three years surveyed.

The Dursley Survey

The Street Farm and Council Office sites provided the following data which is compared with three previous years.

Table 31

				<i>Average SO₃ mgm. per 100 sq. cm. per day</i>			
				1959	1958	1957	1956
Street Farm	..	..	..	0.55	0.49	0.81	0.85
Council Offices	..	..	..	0.53	0.75	0.93	1.07
				<i>Rainfall in inches for each year</i>			
				1959	1958	1957	1956
Street Farm	..	..	..	32.0	33.9	28.6	24.6
Council Offices	..	..	..	32.8	34.9	26.9	24.6
				<i>Deposit in tons per square mile</i>			
				1959	1958	1957	1956
Street Farm	..	..	..	86.6	71.7	59.8	73.2
Council Offices	..	..	..	78.0	81.7	59.0	94.0

(11 months)

The level of sulphur pollution is slightly worsened at Street Farm compared with 1958 but is very considerably better than levels in 1957 and 1956.

The level of sulphur pollution at the Council Offices continues to improve and was the lowest figure for the four years under review.

Despite the long dry summer the rainfall figure is about average with rainfall ranging from 0.14 inches in September up to 5.3 inches in December.

The deposits in tons per square mile are somewhat higher at both sites. Heavy depositions at Street Farm are noted for April 15.8 tons and December 11.8 tons, whilst at the Council Houses there were 11.8 tons in April and 13.5 tons in October.

The Stroud Survey

The Gaumont Cinema and Girls' High School sites gave the following data for the year and this is compared with the findings of three previous years.

Table 32

			<i>Average SO₃ mgm. per 100 sq. cm. per day</i>			
			<i>1959</i>	<i>1958</i>	<i>1957</i>	<i>1956</i>
Gaumont Cinema	..	..	0.88	1.32	1.41	0.81
Girls' High School	..	..	0.67	0.76	0.95	1.21

			<i>Rainfall in inches for each year</i>			
			<i>1959</i>	<i>1958</i>	<i>1957</i>	<i>1956</i>
Gaumont Cinema	..	..	28.6	34.6	27.9	24.1
Girls' High School	..	..	28.9	31.7	26.7	23.0

			<i>Deposit in tons per square mile</i>			
			<i>1959</i>	<i>1958</i>	<i>1957</i>	<i>1956</i>
Gaumont Cinema	..	..	126.1*	154.9	115.9	171.7
Girls' High School	..	..	68.9*	74.5	60.5	82.2

* for the period of 11 months.

The March figures for the Girls' High School site was 38.4 tons per sq. mile, an unexplained and extraordinarily high amount which might have been due to sabotage! In consequence this month's figure was omitted from the averages.

There is a continued improvement in the degree of sulphur pollution at both sites since 1956 for the Girls' School and since 1957 for the Gaumont Cinema.

The rainfall figures are about average despite a dry summer. The figures ranged from 0.08 inches in September to 5.4 inches in December. Both February and May showed low rainfall figures of 0.45 and 1.15 inches respectively.

The deposit figures at the Gaumont Cinema site show a marked improvement over 1956 and 1958 and are more in line although not as good as 1957 data. In the individual months the lowest deposit 3.26 tons was in September (rainfall 0.08 inches) and the highest in November 17.9 tons (rainfall 3.62 inches).

Considering the Girls' High School site and rejecting the remarkable 38.4 tons deposit in March, the total deposition for 11 months at 68.9 tons compares favourably with earlier years. In the eleven months the lowest deposit of 2.6 tons was in August (rainfall 2.75 inches) and the highest 10.7 tons in October (rainfall 2.07 inches).

The Thornbury Survey

The first full year's results of conditions at Walning and Brynleaze Farm are noted.

Table 33

		<i>Average SO₃ mgm. per 100 sq. cm. per day</i>	
		<i>1958</i>	<i>1959</i>
Walning Farm	..	*0.61	0.41
Brynleaze Farm	..	*0.71	0.57
* 10 months only.			
		<i>Deposit in tons per sq. mile</i>	
		<i>1958</i>	<i>1959</i>
Walning Farm	..	*62.2	80.6 (11 months)
Brynleaze Farm	..	51.8 (9 months)	*68.5
* 10 months only.			
		<i>Rainfall in inches</i>	
		<i>1958</i>	<i>1959</i>
Walning Farm	..	*28.8	31.9 (12 months)
Brynleaze Farm	..	17.6 (9 months)	*22.9
* 10 months only.			

There is some improvement in the level of sulphur pollution at both sites in 1959. The deposit figures at both sites if calculated for the full year, have increased in the current year.

*The Gloucester City Survey***Table 34**

		<i>Deposit in tons per sq. mile</i>	
		<i>1958</i>	<i>1959</i>
The Lannet	..	138	79
Technical College	..	93 (11 months)	107
		<i>Average SO₃ mgm. per 100 sq. cm. per day</i>	
		<i>1958</i>	<i>1959</i>
The Lannet	..	1.09 (11 months)	0.96
Technical College	..	1.31	1.04
		<i>Rainfall in inches</i>	
		<i>1958</i>	<i>1959</i>
The Lannet	..	29.2	21.0 (11 months)
Technical College	..	26.7 (11 months)	26.4

There is a notable improvement at the Lannet in respect of deposit, whilst the conditions at the Technical College seem stabilised at a little over 100 tons. The extent of sulphur pollution has markedly lessened at both sites. It is also interesting to note that of the seventeen sites under our jurisdiction the two Gloucester City gauges show the least rainfall. We may yet see the City advertising "Come to sunny Gloucester City".

Finally mention must be made of the "rural" site at Church Road, Heywood, Wilts, formerly represented by the Fullingbridge gauge. As might be expected this gave the lowest deposit gauge figure of all our sites only 54.5 tons, with a rainfall of 25.9 inches for the eleven months of available information.

PART X. SPECTROSCOPY

This section has dealt with 904 samples during the year, 746 being routine investigations into the tin and lead content of canned foodstuffs, 106 being ice lollies which were examined for toxic metals and pH values, and the other 52 being toxicological and other samples, including a "piece of embellishment" from the roof of the Lord Mayor's Chapel. The installation of the pH meter in the water laboratory in December is a great help when dealing with the pH of ice lollies. Samples of fish from Pacific waters were again monitored for radio-activity but without any positive results. Most trouble occurs with high lead values in corned beef where the can used is the square variety which has a round soldered seal at one end. No trouble occurs with corned beef packed in the common cylindrical can.

The section was brought up to full strength in July but has been understaffed again since the resignation of Mrs. K. J. Noyes in mid-December. During this latter period it was possible to continue with some of the development work commenced by Mr. N. J. Atherton. It is now hoped that a satisfactory spectrophotographic method for the determination of copper around the recommended limits will be available by late 1960. The stumbling block to progress seems to be the difficulty of importing copper free electrodes from the United States and the time consumed in obtaining an import licence. These electrodes are essential to this work because the level of copper found in electrodes in this country is anything but constant.

No work has yet been attempted in the determination of zinc. Some elementary statistics on the standards used in the method for tin and lead determinations showed a probable error of 15 per cent in the results; a proportion of this must arise from the handgrinding of the sample after ashing.

PART XI. OTHER ACTIVITIES

As in previous years the Department has had its usual quota of work not actually involving analytical work.

Lectures of a general character on the work of the laboratory were given to the following organisations and schools:— Stoke Bishop Townswomen's Guild, N. W. Townswomen's Guilds Annual Conference, Young Conservatives Association of Long Ashton, Westbury and Henbury and Brentry; The Bristol 20-40 Club, Royal College of Midwives (Refresher Course); Keynsham W.I.; Sea Mills Young Wives Association, and Falfield Prison.

Lectures of a more specific character were given to veterinary students; Public Health Inspectors; Smoke Inspectors; City and Guilds Students and a course of eight lectures to D.P.H. Students. A group of Inspectors of meat and other foods visited and toured the laboratories. A lecture on "the Analysis of Water Supplies" was given at a refresher course to Public Health Inspectors at Wills Hall in April. Three lectures on "Atmospheric Pollution," one on "Noxious Gases in Sewers" and three on "Preservative and Colourings in Foods" were also delivered.

In reverse also members of Staff were on the "receiving end" of the following lectures "Biological Hazards of Radiation" (Dr. Spears,); "Safety and Disposal of Radioactive Materials" (Dr. Lister); "Radiation and Public Health" (a full day course in March); and a "Review of Modern Work on Sewage" (Institute of Sewage Purification).

Interest in atmospheric pollution was fully maintained. Your Analyst attended meetings of the Council and Executive of the Bristol and West Clean Air Council; the Standing Conference on Atmospheric Pollution in May at Stevenage and in September in London. In April the Bristol and West Clean Air Council was addressed by Mr. Courtier of the London County Council Staff on "Radiation and Public Health."

Numerous visits were paid to various establishments in the area for consultations. Among these were the Berkeley Power Station, the Bristol Waterworks Laboratory, the College of Technology; the Council House; the General Hospital; the University of Bristol.

Numbered among our visitors were Dr. Geffen, Ministry of Health; Miss Toler, Department of Scientific and Industrial Research; Mr. Paterson, Ministry of Agriculture; Mr. Abdullah, Markets Inspector, Tanganyika; Dr. Spears, Consultant; and Mr. E. T. Illing, formerly County Analyst for Somerset. We were also pleased to welcome students from Badminton Girls School; student Health Visitors, students from Colston Girls School; Trainee Nursery Nurses.

There was a considerable amount of Committee work during the year. These included four visits to Gloucester to attend the quarterly meetings of the Weights & Measures Committee; four meetings of the newly constituted Scientific and Ancillary Services Sub-Committee of the Health Committee, and the final meeting of the Preventive Medicine Sub-Committee prior to the transfer of the Department to Corporation control.

Several attendances at Court were necessary in relation to watered and fat deficient milks, foreign bodies in foods although there were several instances where a plea of guilty was entered and your Analyst was not required to give evidence.

Mention should be made of one unusual task undertaken by the Senior Staff of the Department over a period of several days. This was the checking transfer and disposal of certain chemicals from the warehouses of a local chemical supplier following a merger, one of the many in a year notable for mergers and take over bids. Some of the more toxic materials were destroyed whilst certain small quantities of alkaloids and the like were taken in the Department's stock of dangerous drugs for use in experimental work. We are used to dealing with relatively small quantities of chemical but this was "bucket chemistry" on a grand scale involving pounds of cyanides, arsenic and mercury salts and the like!

Interest in Civil Defence affairs was fully maintained. There were regular monthly meetings of the local Scientific Intelligence Officers at Henleaze Control. Your Analyst is the Chief Scientific Intelligence Officer for the City and three other Senior members of Staff are trained Officers. All four attended the Regional Conference in May. Mrs. A. Jones also attended a one week course (Part III) at Easingwold in Yorkshire in January. Whilst other members completed the similar course in December, this time locally.

Finally mention must be made of the Committee work of the Association of Public Analysts. I have the honour to be Chairman of the Standards Committee of the Association and much valuable work was done throughout the year in the formulation of standards, codes of practice and the like. I would again express my appreciation and thanks to the Health Committee for their understanding of the value of this work and for the permission granted to me to attend meetings outside Bristol.

PORT HEALTH SERVICES

Medical Inspection and Sanitary Circumstances

Dr. D. T. Richards

Senior Medical Officer (Port)

SECTION I

Introduction

The Port of Bristol has again experienced a year of expanding trade. Imports and exports exceeded those for 1958 by 470,000 and 32,000 tons respectively. The net tonnage of foreign arrivals—yet another peacetime record—totalled 4,903,022, which was an increase of 141,000 tons over the total for the previous year. During 1959 there were 1,703 “foreign-going” arrivals, this figure being 111 less than for the previous year; on the other hand coastal arrivals, including inland water craft, increased by 132 to a total of 6,743.

Bristol's trade is extensive and world wide in distribution. A list of the principal ports from which vessels arrive is given in Section III of this Report. Cases of smallpox, plague and some of the other quarantinable diseases, so-called, frequently occur in ports included in this list; other ports in the list serve as outlets to the sea for merchandise from infected inland territories. From parts of the world such as these 522 incoming vessels were cleared by the Port Medical Officer accompanied by a Port Health Inspector, but throughout the year all arriving vessels were at once boarded by a Health Inspector and kept under careful supervision whilst in dock. Information giving the date of vaccination of each member of the crew is now regularly sought when vessels are first boarded. Invariably, and without question, all of the vaccination certificates are produced for scrutiny. Possession of a valid certificate of vaccination is now a condition of employment with a growing list of shipping companies. This is an important step forward. Some of these companies also insist upon re-vaccination at yearly intervals.

The provisions of the Public Health (Ships) Regulations, and of the Public Health (Aircraft) Regulations, 1952, were enforced throughout the year. At one period, attempts by unauthorized persons to board incoming ships were dealt with informally but effectively in collaboration with H.M. Customs and the Port Authority. These offences have not been repeated. The health of more than 62,000 crew members and passengers was checked on arrival; 625 of these were discovered to be in need of medical attention, and 19 were sent to the infectious diseases hospital for observation and treatment.

In February the oil discharging berths at Redcliffe Bay came into operation, and during the year several large tankers discharged their cargoes at this new terminal when conditions were suitable. Health clearance procedure under the Regulations involves a journey by launch to the Redcliffe Bay moorings, but it is understood that adequate notice of the intended arrival of these vessels will usually be forthcoming and no special problem has been created.

Detailed medical examinations, pursuant to the provisions of the Aliens Order 1953, were carried out at the seaport and at the airport. No rejection certificates were issued.

TABLE A

<i>Name of Officer</i>	<i>Nature of appointment</i>	<i>Date of appointment</i>		<i>Qualifications</i>	<i>Any other appointments held</i>
		<i>(a)</i> <i>(Original)</i>	<i>(b)</i> <i>To present post</i>		
Wofinden, Dr. R. C.	Port Medical Officer	29.9.47	1.2.56	M.D., B.S., D.P.H., D.P.A.	Medical Officer of Health
Skone, Dr. J. F.	Deputy Port Medical Officer	1.10.59	1.10.59	M.D., D.P.H.	Deputy Medical Officer of Health
Roads, Dr. P. G.	Deputy Port Medical Officer	13.8.56 <i>Left service 31.7.59</i>	13.8.56	M.D., D.P.H.	Deputy Medical Officer of Health
Richards, Dr. D. T.	Sen. Asst. Medical Officer (Port)	1.11.38	13.1.47	L.R.C.P. (Lond.) M.R.C.S. (Eng.), D.P.H.	—
Macfarlan, Dr. A. M.	Assistant Medical Officer (Port)	2.2.53 <i>Left service 31.5.59</i>	1.12.58	M.A., M.B., B.Ch.	—
Febry, Dr. G. N.	Assistant Medical Officer (Port)	20.1.58	15.6.59	M.B., Ch.B.	—
Redstone, Mr. F. J.	Chief Port Health Inspector	1.9.40	1.10.43	F.R.S.H., F.A.P.H.I.	—
Davies, E. I.	Senior Port Health Inspector	13.5.37	1.11.43	Certs. of R.S.I., S.I.E.J.B., R.S.I. Meat and Other Foods; Cert. Testamur Welsh School of Medicine in Public Health and Hygiene; Master Mariner (Foreign-going)	—
Blampied, F. C.	District Public Health Inspector (Port)	1.12.48	1.1.57	Certs. of R.S.I., R.S.I. Meat and Other Foods; Smoke Inspector's Cert. R.S.I.	—
Fowler, C. H.	District Public Health Inspector (Port)	1.9.57	1.9.57	Cert. R.S.I.	—
Lack, W. H. G.	District Public Health Inspector (Port)	1.9.57	1.9.57	Cert. R.S.I.; and R.S.I. Cert. in Tropical Hygiene	—
Bowen, W. T.	Assistant to Port Health Inspector	27.1.36	27.1.36	Master Mariner's Cert.	—
Baston, C. W.	Assistant to Port Health Inspector	13.2.38	13.2.38	—	—
Henley	Senior Group Clerk	1.8.37	11.6.56	Intermediate Certificate Diploma Municipal Administration	—

IN ADDITION:—The following M.O.'s undertake relief duties as required: Dr. A. M. Fraser and Dr. J. E. Kaye.

Measures designed to curtail the emission of dark smoke from vessels in dock, prescribed in the Dark Smoke (Permitted Periods) (Vessels) Regulations, 1958, were pursued with vigour during the year. Successful court proceedings were instituted in two cases. At this stage, eighteen months after the Regulations came into force, a pronounced improvement is to be reported.

A suitable percentage of 601,000 tons of imported food was inspected, sampled and sent for chemical or bacteriological examination in accordance with the legislation which protects imported food supplies. A full account of this work is included in the text and in the tables which follow.

Throughout the period under review the scope of responsibility at the Port has increased in many directions, and this Report would be incomplete without some reference to the zealous and commendable efforts made by each member of the Port Health Staff during 1959, sometimes under the most adverse of conditions.

SECTION II

Amount of Shipping Entering the District During the Year

Comparative figures for foreign and coastwise arrivals, together with import and export tonnages during the last four years are shown in the following table.

<i>Year</i>	<i>Vessels normally trading</i>		<i>Tonnage of foreign</i>	
	<i>Foreign</i>	<i>Coastwise</i>	<i>Imports and Exports</i>	
1959 ..	1,703	6,743	3,856,903	155,290
1958 ..	1,814	6,611	3,840,997	132,999
1957 ..	1,563	4,334	3,421,199	94,856
1956 ..	1,442	4,855	3,607,490	126,577

SECTION III

Character of Shipping and Trade During the Year

The trade is general in nature and is constant in character from year to year. It is fully dealt with in tables (B) and (C) which follow.

TABLE B

Amount of Shipping Entering the District During the Year

<i>Ships from</i>	<i>Number*</i>	<i>Tonnage*</i>	<i>Number inspected</i>		<i>No. of ships reported as having had during the voyage infec- tious disease on board†</i>
			<i>by the Medical Officer of Health</i>	<i>by the Health Inspector</i>	
Foreign ports	1,703	4,903,020	522	1,690	51
Coastwise . .	6,743	1,726,035	—	1,030	—
Total . .	8,446	6,629,055	522	2,720	51

* Figures supplied by courtesy of the Port of Bristol Authority. (Discrepancy between number of vessels shown as arriving and number inspected in foreign section arises from differing classification of "Foreign" and "Coastwise" vessels as applied by the Port of Bristol Authority and the Bristol Port Health Authority).

† Excluding vessels having venereal disease on board.

TABLE C (a)

Passenger Traffic

		<i>Seaport</i>	<i>Airport</i>
Inwards	British	1,878	563
	Alien	271	863
Outwards	British	1,313	558
	Alien	197	590

TABLE C (b)

Cargo Traffic

PRINCIPAL IMPORTS

<i>Commodities</i>						<i>Tons</i>
Cereal Products	..	..	..	..	..	21,744
Cocoa	..	..	..	..	..	20,663
Coffee	..	..	..	..	..	7,112
Feeding Stuffs for Livestock	..	..	..	..	..	516,650
Fertilisers	..	..	..	..	..	222,815
Fruit: Bananas	..	..	..	..	..	48,245
Canned	..	..	..	..	..	17,897
Dried	..	..	..	..	..	7,138
Other kinds	..	..	..	..	..	15,927
Grain: Barley	..	..	..	..	..	183,455
Maize	..	..	..	..	..	438,580
Wheat	..	..	..	..	..	389,377
Other kinds	..	..	..	..	..	168,346
Metals: Aluminium	..	..	..	..	..	62,439
Copper	..	..	..	..	..	7,210
Iron and Steel	..	..	..	..	..	11,530
Zinc and Spelter	..	..	..	..	..	25,542
Other kinds	..	..	..	..	..	9,275
Molasses	..	..	..	..	..	77,158
Oilseeds and Oilnuts	..	..	..	..	..	61,431
Ores	..	..	..	..	..	133,083
Paper	..	..	..	..	..	37,217
Petroleum: Spirit	..	..	..	..	..	313,565
Other kinds	..	..	..	..	..	601,845
Provisions: Frozen Meat	..	..	..	..	..	21,461
Other kinds	..	..	..	..	..	39,499
Sugar	..	..	..	..	..	7,072
Tea	..	..	..	..	..	5,274
Timber	..	..	..	..	..	121,396
Tobacco	..	..	..	..	..	24,858
Wines and Spirits	..	..	..	..	..	9,665
Woodpulp	..	..	..	..	..	130,943
Other Goods	..	..	..	..	..	98,491
Total foreign imports						3,856,903

PRINCIPAL EXPORTS

Carbon Black	9,932
Chemicals	3,265
Clay	7,972
Cocoa and Cocoa Waste	3,680
Coke	16,621
Government Stores	1,614
Metals: Iron and Steel	26,569
Non-ferrous	10,388
Motor Vehicles and Parts	47,094
Ores	1,397
Petroleum	2,066
Strontia	5,390
Timber manufactures	1,275
Other Goods	18,027
Total foreign exports ..	155,290

Note:—Figures supplied by the courtesy of the Port of Bristol Authority.

TABLE C (c)

Principal Ports from which Ships Arrive

<i>Country</i>	<i>Ports</i>
Algeria	Algiers, Oran, Bougie, Philippville, Mostagagam.
Argentina	Buenos Aires, Bahia Blanca, Rosario, San Lorenzo, San Nicolas.
Australia	Adelaide, Albany, Bunbury, Brisbane, Cairns, Freemantle, Geelong, Geraldton, Melbourne, Gladstone, Port Pirie, Sydney, Townsville, Urangan, Wallaroo.
Belgium	Antwerp, Bruges, Ghent, Zeebrugge.
Belgian Congo	Matadi, Boma.
Brazil	Bahia, Forteleza, Natal, Port Elegre, Rio de Janeiro, Recife.
British West Indies ..	Antigua, Barbados, Dominica, Kingston, Montega Bay, Port Antonia, St. Kitts, Trinidad.
Burma	Rangoon.
Canada	Botwood, Halifax, Kittimat, Chemainus, Montreal, New Westminster, Port Alfred, Port Fortune, Port Churchill, Prince Rupert, Quebec, St. John, Sorel, Three Rivers, Toronto, Vancouver.
Canary Islands	Las Palmas, Teneriffe.
Ceylon	Colombo.
Cyprus	Famagusta, Limassol, Nicosia.
Cyrenaica	Tripoli.
China	Shanghai.
Chile	Puntarenas.
Denmark	Copenhagen, Esburg, Frederikssund, Skagen, Thyboron.
Egypt	Alexandria, Port Said.
Estonia	Tallin.
Eire	Cork, Dingle, Dublin, Foynes, Limerick, Waterford.
Fiji	Souva.
Finland	Helsingfors, Kotka.
Formosa	Formosa.
France	Abbeville, Bordeaux, Boulogne, Deauville, Dieppe, Dunkirk, Donges, Dahouet, Le Havre, Cherbourg, Honfleur, La Rochelle, Libourne, Marseilles, Nantes, Rouen, Tonnay-Charente, Treport, St. Malo, St. Valery, Vannes.
French Cameroons ..	Tiko Is.
French Equatorial Africa	Dakar, Port Gentil.
Gambia	Bathurst.
Germany	Bremen, Bremerhaven, Emden, Friedrichshaven, Hamburg, Stettin, Stralsund, Wismar.
Ghana	Accra, Takoradi.
Greece	Patras, Piraeus, Zante.
Hawaii	Hilo.
India	Bedi, Bombay, Bhavengar, Calcutta, Chalna, Cochin, Mangalore, Vizagapatam.
Indonesia	Djakarta, Surabaya, Tegal.
Iran	Abadan, Basra, Bahrein, Bushire, Hormuz, Khorramshar.
Israel	Haifa, Jaffa.
Italy	Bari, Genoa, Livorno, Naples, Palermo, Salerno, Spezia, Cagliari, Civitavecchia, Taranto, Venice.
Japan	Kobe, Yokohama, Tokio.
Jordan	Aqaba.
Jugoslavia	Rijeka, Split.
Kenya	Mombassa.
Kuwait	Mana al Ahmadi.
Libya	Benghazi.
Madras	Pondicherry.
Malay States	Penang Is, Singapore.
Mexico	Coatzacoalcos, Mazatlan, Tampico.
Morocco	Agadir, Ceuto, Casablanca, Saffi, Sousse.
Mozambique	Beira, Mozambique.

TABLE C (c) continued

<i>Country</i>	<i>Ports</i>
Netherlands	Amsterdam, Delfyzl, Dordrecht, Flarrinden, Rotterdam, Spisk, Zandevoort, Zaandan.
Netherlands West Indies	Aruba, Curacao.
Nigeria	Lagos, Sapele, Port Harcourt, Warri.
Nauru Islands	Nauru Islands
New Zealand	Auckland, Port Chalmers, Lyttleton, Napier, Timaru, Wellington, New Plymouth.
Norway	Aalsund, Ardalstangen, Bergen, Floro, Kopervik, Kristiansund, Oslo, Havanger, Stavenger, Svolvaer, Sanndalsova, Tredcestrand, Trondheim.
Pakistan	Chittagong, Karachi.
Persian Gulf	Bahreïn, Ras Tanura.
Peru	Calloo, Mallendo.
Portugal	Faro, Lisbon, Oporto, Leixors, Vila Real.
Puerto Rico	San Juan.
Rumania	Constanza, Galatz.
Poland	Gdynia.
Portugese East Africa ..	Nacala.
Sierra Leone	Freetown.
Siam	Bangkok.
South West Africa ..	Walvis Bay.
Spain	Almeria, Barcelona, Bilboa, Cartagena, Huelva, La Vera, Tarragona, Seville, Valencia, Villareal.
Sudan	Port Sudan.
Sweden	Gelfe, Gothenburg, Iggesund, Kramfors, Malmo, Nyhammar, Stockholm, Sundsvall.
Syria	Latakia.
Tanganyika	Dar-es-Salam, Lindi, Mitwara, Tanga, Zanzibar.
Tunisia	Sfax, Tunis.
Turkey	Iskanderun, Istanbul, Izmar, Mersia.
Uruguay	Las Piedras, Puerto la Cruz, Montevideo.
Union of South Africa ..	Cape Town, Durban, East London, Port Elizabeth.
Union of Soviet Socialist Republics	Archangel, Leningrad, Kaliningrad, Novorosisk.
Tasmania	Hobart.
United States of America	Baltimore, Baton Rouge, Beaumont, Boston, Boco Grande, Charlston, Corpus Christi, Freeport, Galveston, Houston, Los Angeles, Mobile, New Orleans, Newport, New York, Norfolk, Port Arthur, Bridgeport, Philadelphia, Port Jacksonville, San Francisco, Tacoma, Tampa, Texas City, Wilmington, Chicago.
Venezuela	Caripito, Punta Cardon, Caracus.
West Indies (U.S.U.) ..	Porto Rica.
Yugoslavia	Sibenik.

SECTION IV

*The number of craft and tonnage for
INLAND BARGE TRAFFIC is included
in the Coastwise Traffic by the Port of
Bristol Authority*

Places served by the traffic:

Banbury	Newport
Barry	Sharpness
Bridgewater	Stourport
Cardiff	Swansea
Frampton	Upton
Gloucester	Worcester
Lydney	

SECTION V

Water Supply

The source of supply for the District and for the Shipping are as described in my report for 1955, and are unchanged except for the discontinued water boat service at the Bristol City Docks which is mentioned below.

(1) *Ships' Water Tanks*

(i) s.s. "Swainsby." Complaints concerning the drinking water were received from the crew of this vessel, and samples were obtained from each of the storage tanks. These were reported to be quite satisfactory.

(ii) s.s. "Nicholas K." (iii) m.v. "La Bahia." (iv) s.s. "Hermiston." Following complaints, samples were taken from the drinking water tanks of these ships. High bacterial counts were obtained in all samples, and in each case the storage tanks were cleansed, cement washed and filled with the docks main supply.

(v) m.v. "Border Terrier." Most of the officers and several of the passengers on this vessel developed slight fever with sickness and diarrhoea. An officer and an apprentice were removed to the Infectious Diseases Hospital where a provisional diagnosis of paratyphoid fever was made. Samples of drinking water from the ship were sent to the laboratory, but were reported to be in all respects satisfactory. It was later confirmed that a *s.typhimurium* was the causal organism, and the origin of the infection was considered to be the artificial cream filling in cakes purchased at the previous port of call.

(vi) m.v. "Salcombe." A routine sample was taken from this local sandsucker and was found to be satisfactory.

(2) *Docks Water Supply*

Information was received from the Swansea Port Health Authority that a master had complained about the drinking water supplied to his vessel at Avonmouth Docks. It was alleged that when the water was boiled to make tea, the liquid became very dark in colour when milk was added to the infusion. This suggested a possible excess of iron—probably in the form of rust—in the water.

To ascertain the cause, bacteriological and chemical samples were drawn from the hydrant which had been used to supply the ship at Avonmouth. These were taken first without flushing the hydrant, and next after 50 gallons had been flushed through. The two bacteriological samples and the second chemical sample were satisfactory. The first chemical sample, however, contained an excess of iron and this seemed to indicate that, contrary to standing instructions the waterman had not flushed the hydrant before supplying the ship.

The Port Authority was informed and issued written instructions to all watermen emphasising that at all times at least 50 gallons of water must be flushed through the hydrants. and that a further 50 gallons of water should be run through the standpipe and hose before connecting these to ships' tanks.

A total of 31 samples were taken from quayside hydrants during the year, Some of these gave a bacterial count which was slightly above that expected in treated water. The counts obtained from repeat samples, which were taken after adequate flushing, were reported to be normal and satisfactory. As an

added precaution against the contamination of quayside water supplies, and in order to prevent the accumulation of stagnant water, the Port Authority has provided all hydrant chambers with efficient drainage channels. They have also installed several modern type hydrants to replace those of an obsolete pattern.

The water boat is no longer available for the supply of ships with drinking water at the City Docks. The craft normally used for this purpose went out of service early in the year. Henceforth, vessels requiring drinking water when moored at wharfs where supplies are not available will have to proceed to a suitably equipped berth to obtain replenishments.

Drinking Water Samples from Ships

<i>Name of ship</i>	<i>Result</i>
s.s. "Swainsby"	Satisfactory
s.s. "Hermiston"	Satisfactory
m.v. "La Bahia"	Unsatisfactory
s.s. "Nicholas K"	Unsatisfactory
m.v. "Border Terrier"	Satisfactory
m.v. "Salcombe"	Satisfactory

SECTION VI

Public Health (Ships) Regulations, 1952

(1) *List of Infected Areas (Regulation) (6)*

This list is prepared and brought up to date monthly. It summarises the information contained in the World Health Organisation's Weekly Epidemiological Record of Quarantinable Diseases prepared for the guidance of Port Health Authorities, and is regularly circulated as follows, any important addition or amendment being subsequently forwarded during the month as a separate memorandum:—

H.M. Customs and Excise (Seaport and Airport)
H.M. Immigration Officer (Seaport and Airport)
The Haven Master (for distribution to pilots)
The Manager, Lulsgate (Bristol Airport)
Medical Officers, Shipping Federation
Medical Officers, Special Treatment Centres
The Docks Superintendent
Waterguard Superintendent
Pilotage Collector, Pill

(2) *Radio Messages*

- (a) Arrangements for sending permission by radio for ships to enter the district—Regulation 13.
- (b) Arrangements for receiving messages by radio from ships and for acting thereon—Regulation 14 (1), (a) and (2).

These were described in the 1955 Annual Report and are unchanged.

(3) *Notification otherwise than by Radio—Regulation 14 (1) (b)*

Arrangements for receiving notification otherwise than by radio and for acting thereon.

These are unchanged.

(4) *Mooring Stations (Regulations 22 to 30)*

Situation of stations, and any standing directions issued under these Regulations.

The details given in the quinquennial report are un-changed.

(5) *Arrangements for:—*

- (a) Hospital accommodation for infectious diseases (other than smallpox).
- (b) Surveillance and follow-up of contacts.
- (c) Cleansing and disinfection of ships, persons, clothing and other articles.

Unchanged.

SECTION VII

Smallpox

1. Cases and suspected cases of smallpox occurring within the district are sent to the smallpox wing of the Ham Green Infectious Diseases Hospital, Pill, near Bristol.

2. Ambulance facilities are provided by the Ambulance Service of the Bristol Corporation, which is administered by the Medical Officer of Health. The vaccinal state of the ambulance crews is satisfactory and subject to continuous review.

3. One consultant is available in the event of smallpox; he is Dr. J. Macrae, of the Ham Green Infectious Diseases Hospital, Pill near Bristol.

4. Facilities for the laboratory diagnosis of smallpox are available in conjunction with the Public Health Laboratory Service.

SECTION VIII

Venereal Diseases

The following table clearly shows that the incidence of venereal infection amongst seamen entering the Port of Bristol has not changed significantly during the past seven years. Approximately half of the cases included under the heading "Non V.D." are believed to have received ineffectual treatment at sea or at a previous port of call, apparently for acute gonorrhoea, and attend the treatment centre without any authentic record of previous tests taken, or of the kind of treatment administered to them. The others in this group of cases comprise men under precautionary surveillance, and some who request tests to exclude infection after exposure abroad.

Year			Lympho-				Non V.D.	Total
			Syphilis	Chancroid	granuloma	Gonorrhoea		
1953	..	..	26	6	6	142	277	457
1954	..	..	30	20	3	112	277	442
1955	..	..	39	13	3	135	278	468
1956	..	..	27	16	2	116	252	413
1957	..	..	20	13	5	123	254	415
1958	..	..	22	15	3	134	245	419
1959	..	..	31	11	11	134	271	458

Within recent years, but especially during 1959, some difficulty in the management of new cases has been experienced because a large number of ships now arrive at the port and stay only for sufficient time to discharge part cargo. Often only one or two attendances are possible before the ship leaves the port. This influences the nature and scope of the treatment provided. Although continuity cards are issued to these men a large number of them invariably default at the next port.

Full information concerning the situation, and giving the hours during which the Medical Officer is in attendance at the Venereal Disease Centres at Avonmouth and Bristol Docks, is given to the crew of every vessel entering port. This information is contained in handbills, including a sketch map, which are freely distributed to each ship. When indicated, in-patient treatment under the direction of the venereal diseases consultant is available at the Ham Green Infectious Diseases Hospital.

The Port Medical Officers, who are usually the first to ascertain venereal conditions, act in an additional capacity as Medical Officers to the Avonmouth Venereal Diseases Centre. This arrangement works very well. Co-operation with the medical officers of the Shipping Federation is excellent.

SECTION IX

Cases of Notifiable and Other Infectious Diseases in Ships and

SECTION X

Table "D" is self explanatory. No incident of outstanding clinical interest is reported but on a number of occasions detailed and careful management became necessary when cases of obscure fever, or rashes accompanied by fever, were ascertained on vessels recently returned from ports on seaboards traditionally associated with smallpox and the other quarantinable diseases. One case of malaria was later confirmed as a recurrence of an old infection.

TABLE D

Cases of Notifiable and Other Infectious Diseases on Ships

Disease	Category and number of cases during the year							Number of ships con- cerned
	Cases landed from ships from foreign ports		Cases which have occurred on ships from foreign ports but have been disposed of before arrival		Cases landed from other ships		Total	
	Pass.	Crew	Pass.	Crew	Pass.	Crew		
Chicken Pox	—	—	—	1	—	—	1	1
Dysentery	—	1	—	—	—	—	1	1
Enteritis	—	4	—	—	—	—	4	4
Erysipelas	—	—	—	1	—	—	1	1
Food Poisoning	8	14	—	—	—	—	22	1
Influenza	—	63	—	—	—	—	63	32
Measles	2	—	—	—	—	—	2	1
Malaria	—	1	—	—	—	—	1	1
Pneumonia	—	1	—	—	—	—	1	1
Pyrexia (unknown or.)	—	2	—	—	—	—	2	1
Tuberculosis (pul.) ..	—	4	—	—	—	—	4	4
Tuberculosis (non-pul.)	—	2	—	—	—	—	2	2
Vaccinia	—	1	—	—	—	—	1	1
Totals	10	93	—	2	—	—	105	51

SECTION IX

Measures Taken Against Ships Infected with or Suspected of Plague

1. All vessels from infected or suspected ports are required to attach efficient rat guards to the mooring ropes.
2. Suitable lengths of tarred hessian are wrapped around moorings outside the leads when the standard types of rat guards are not available.
3. Arrangements are made for the fumigation of the vessel with hydrogen cyanide when this is advisable.

SECTION XII

Measures taken against Rodents in Ships from Foreign Ports

(1) Routine inspection and rodent control measures in ships, described in detail in the Annual Report for 1955, were continued throughout the year.

(a) *Foreign-going ships*

A high percentage of these vessels carry considerable quantities of bulk or bagged raw materials which are compounded into animal feeding stuffs at local mills after discharge. Most of these cargoes are loaded in countries where rodent control at the ports is not always very effective. Despite this, moderate evidence of infestation was found only in a small number of these vessels. This trend has been observed for the last two or three years; it is largely due to efficient rat proofing and the elimination of rat harbourage in ships; but there is also an increasing keenness on the part of ships' officers to carry out repressive measures as soon as rodents are discovered on board.

A total of 130 rats were destroyed and recovered from 14 ships. Only 7 ships during the year were found to be moderately or heavily infested, but all of these left to complete discharge of cargo at other ports. The usual forward notices were sent to the ports concerned, which were London, Liverpool, Glasgow, Rotterdam and Bremen. Replies from three ports, including Rotterdam, told of a further 96 rats recovered from three of the ships after appropriate treatment.

Routine searches carried out on all ships revealed an additional 57 with very slight rat traces. It was suggested to the Masters that early treatment with mixed Warfarin baits might be advisable. Supplies of this substance were procured for 14 ships and in each case a demonstration was given to the Chief Officers showing them how and where to set the baits, and the precautions which should be taken.

In one ship pronounced infestation with mice was found in the cargo holds, which were also infested with insects. A high concentration of methyl bromide gas was therefore used, resulting in the destruction of 56 mice.

During the year 68 black rats were sent to the laboratory for tests. All were declared to be free from plague.

The following table is of interest. It shows that the fall in the rat population on general cargo ships during the past few years has been maintained. As in recent years the table shows that in 1959, most of the rats were recovered from an extremely small number of fairly heavily infested ships.

<i>No. of rats per Ship</i>	<i>1959 No. of Ships</i>	<i>Total rats recovered</i>	<i>1958 No. of Ships</i>	<i>Total rats recovered</i>	<i>1957 No. of Ships</i>	<i>Total rats recovered</i>
1- 5	7	12	10	31	4	13
6-10	3	34	—	—	3	23
11-15	1	12	—	—	2	23
16-20	1	17	2	35	1	18
21-25	1	22	1	25	—	—
26-30	—	—	—	—	1	29
31-35	1	33	—	—	1	34
36-40	—	—	1	37	—	—
41-70	—	—	—	—	1	69
Totals ..	14	130	14	128	13	209

In accordance with Article 52 of the International Sanitary Regulations, 157 Deratting Exemption Certificates and 7 Deratting Certificates were issued in 1959. Six of the latter were issued after fumigation with hydrogen cyanide and one after treatment with methyl bromide gas.

(b) *Coastwise Vessels*

These ships are now so free from rats and mice that rodent traces are seldom discovered. Rodent control certificates were issued to five coastwise vessels during 1959. Applications for these documents become fewer in number each year because signs of rats and mice are so rare that it seems to be pointless to confirm this by procuring a certificate for which a small fee is payable.

(c) *Inland Water Craft*

Under this heading are included tugs, powered and towed barges, dredgers and floating elevators. The barges and floating elevators require regular inspection.

During the year no report was received of infestation in barges, mainly because a small number of barges were used for short term storage of animal foods. The floating elevators received continuous systematic attention because they commonly provide a means of access for the rat from ship to quayside premises. At the earliest signs of activity on these elevators thorough baiting is carried out.

The Port Authority, who own some of the floating elevators, are of course most anxious to prevent infestation and give every assistance and co-operation. They have eliminated all unnecessary harbourages and have even made structural alterations in one of the elevators in order to make it easier to carry out effective measures.

(2) *Arrangements for the Bacteriological or Pathological Examination of Rodents with special reference to Rodent Plague, including the number of Rodents sent for examination during the year.*

A routine proportion of all rats recovered is sent for examination for evidence of *B. pestis* to the Public Health Laboratory Service, Canynge Hall, Clifton. Of the 130 black rats obtained from ships and inland water craft, 68 (5 per cent) were sent to the laboratory for examination. All were reported to be free from infection with plague.

(3) *Arrangements in the District for Deratting Ships, the methods used, and, if done by a Commercial Contractor, the name of the Contractor.*

The deratting of ships is done by commercial contractors who use hydrogen cyanide or sodium fluoro-acetate. The under-mentioned firm carried out work at this port during 1959:

London Fumigation Co. Ltd., London.

TABLE E
Rodents Destroyed during the Year in Ships from Foreign Ports

<i>Category</i>			<i>Number</i>
Black rats	..	..	130
Brown rats	..	..	—
Species not known	..	..	—
Sent for examination	..	..	68
Infected with plague	..	..	—
Mice	..	..	57

TABLE F
Deratting Certificates and Deratting Exemption Certificates Issued during the year for Ships from Foreign Ports

<i>No. of Deratting Certificates issued</i>					<i>Number of De-ratting Exemption Certificates issued</i>	<i>Total Certificates issued</i>
<i>After fumigation with H.C.N.</i>	<i>Other fumigant</i>	<i>After trapping</i>	<i>After poisoning</i>	<i>Total</i>		
6	1*	—	—	7	157	164

* Methyl Bromide.

SECTION XIII

Inspection of Ships for Nuisances

A pronounced improvement is reported. Only 8 per cent of the 2,270 "foreign-going" and "coastwise" vessels inspected were found to have defects. The number and nature of these defects are given in the accompanying table.

Cockroach infestations were prevalent. The majority were only slight or moderate in severity, discovered in most cases in the living quarters of special ratings. The reason for this seemed to be the indifference of these men, possibly coupled with inadequate supervision. Many of the infested quarters had previously been treated with insecticidal lacquer. Unfortunately it was not possible to ascertain the date of application of this lacquer, which is very effective when it is first applied. Only seven infestations with the common bed bug were dealt with during the year; three of these were pronounced, and discovered in foreign-owned ships in which the general standard of hygiene was poor. Most of the ships with insect infestation in the accommodation were disinfested at this port. In a few instances, when a valid reason was forthcoming Masters were given written advice to arrange for disinfestation at the terminal discharging port, and forward notices were sent to the Port Health Authorities concerned.

Wear, tear and structural defects were minor in type and call for no special comment. They included drainage defects, faulty sanitary fittings, dirty quarters and beds, defective side scuttles. Arrangements were made without difficulty for these defects to be remedied.

TABLE G
Inspection of Ships for Nuisances

Nature of defects and inspections	No. of inspections carried out	Notices served			No. of defects found	Result of serving notices	
		Statutory	In-formal	Forward (PHAs/ M.O.T.)		No. of defects	
						Rem-died	Not rem-died
Original construction	3,643	—	174	24	15	10	5
Structural wear and tear					173	86	87
Dirt, vermin, etc.					316	255	61
	3,643	—	174	24	504	351	153

Hygiene of Crews' Spaces
Vessels Trading Coastwise and Foreign

		British		Foreign		Totals
		s.s.	m.v.	s.s.	m.v.	
No. of revisits to vessels in dock by Inspectors	..	561	1,518	381	1,183	3,643
No. of vessels reported defective	..	85	86	33	32	236
No. of vessels—defects remedied	..	66	63	20	36	185

Defects

Nationality	No. of Ships Inspected	Original Construction		Wear and Tear		Dirt and vermin	
		No. of Ships	No. of defects	No. of Ships	No. of defects	No. of Ships	No. of defects
British s.s.	290	3	9	25	69	75	108
m.v.	1,278	2	5	25	64	64	103
Foreign s.s.	205	—	—	5	14	26	44
m.v.	947	1	1	6	26	41	61
Totals	2,720	6	15	61	173	206	316

Nature of defect	No. of Defects			No. of Defects reported by Forward Notices, etc., to:—			No. of Ships and Nationality	
	Found	Rem'd	Not Rem'd	Other PHAs.	M.O.T. Surv'r	Owner Master	British	Foreign
Original construction	15	10	5	—	1	10	5	1
Wear and tear ..	173	86	87	22	—	118	50	11
Dirt, vermin and other causes ..	316	255	61	23	—	128	136	70
Totals ..	504	351	153	45	1	256	191	82

SECTION XIV

Public Health (Shell Fish) Regulations 1934 and 1948

No changes have occurred during 1959.

SECTION XV

Medical Inspection of Aliens

The organisation and scope of this work is unchanged. Details are given in the accompanying table, which is a return of the duties carried out at the three seaports and at the Lulsgate (Bristol) Airport. It is pointed out that the issue of a certificate implies the rejection or conditional landing of an alien for medical reasons.

The following medical officers hold warrants of appointment as Medical Inspectors of Aliens.

Dr. R. C. Wofinden, Medical Officer of Health

Dr. P. G. Roads, Deputy Medical Officer of Health

(until 31st July, 1959)

Dr. J. F. Skone, Deputy Medical Officer of Health

(from 1st October, 1959)

Dr. D. T. Richards, Senior Assistant Medical Officer (Port)

Dr. G. N. Febry, Assistant Medical Officer (Port)

Dr. A. Fraser, Assistant Medical Officer

Dr. J. E. Kaye, Assistant Medical Officer

Annual Return of Medical Inspector of Aliens follows:

Medical Inspection of Aliens

Annual Return of the Medical Inspector of Aliens for 1959

	SEAPORT				AIRPORT			
	Total	No. inspected by Medical Inspector	No. subjected to detailed examination by the Medical Inspector	No. of Certificates issued	Total	No. inspected by Medical Inspector	No. subjected to detailed examination by the Medical Inspector	No. of Certificates issued
(a) Total number of aliens landing at the Port	271	68	23	—	836	24	17	—
(b) Aliens refused permission to land by Immigration Officer	—	—	—	—	—	—	—	—
(c) Total aliens arriving at the Port	271	68	23	—	836	24	17	—
Total number of vessels/aircraft carrying alien passengers . .				Seaport 121	Airport 98		Seaport 85	Airport 76
Number of vessels/aircraft dealt with by the Medical Inspector				INWARDS 121	OUTWARDS 98		—	—

SECTION XVI

**Arrangements for the Burial on Shore of Persons who have Died
on Board Ship from Infectious Disease**

No changes have occurred during 1959.

SECTION XVII

Other Matters**(1) Measures against Rodents on Docks, Quays, etc.**

Suitable action, either by setting traps or anticoagulant poison baits for appropriate periods, continued during the year throughout the docks and at the Chittening Trading Estate. A total of 173 black and 2 brown rats were known to have been destroyed by these methods. Laboratory reports on 40 of the black species were negative.

This difference in the number of each species accounted for does not mean that brown rats in the dock area are proportionately outnumbered, or that methods used to exterminate them are less successful. The difference is due almost entirely to the burrowing habits of the brown rat, which dies in inaccessible places. Very few of them are recovered after successful bait laying. The black rats, on the other hand, who have a closer kinship with arboreal wild rodents, are climbers by nature. They infest roof spaces and the upper storeys of buildings. It is very much easier to recover them when they are killed.

Surveys of waste ground, warehouses, mills and granaries have shown quite clearly that the activity of both species is only moderate, even in the worst of the affected areas, but this fact must not be regarded with any complacency for some of the provender mills require careful and repeated treatment merely to maintain an upper hand. Most of the 173 black rats recovered during the year came from three provender mills which have harboured this species for some years. The ultimate eradication of these rats presents a very formidable task, for harbourages are always available either in the form of stacks of raw material or within the structure of these buildings.

Category	1959	1958	1957	1956	1955
Black Rats ..	173	96	234	346	426
Brown Rats ..	2	80	112	203	127
Total ..	175	176	346	549	553
Sent for examination	40	48	141	95	120
Infected with plague	—	—	—	—	—
Mice	—	2	11	15	33

(2) Food Inspection

Imports of wheat and prepared foods, at 601,000 tons, were 15,000 tons less than in 1958. Of the prepared imported foods, totalling 212,000 tons, there was a reduction in the tonnage of such items as frozen meat, dairy products and tea, but this was offset by an increase in the importation of fresh fruit and coffee beans.

Food cargoes, made up of a wide variety of commodities, were inspected prior to and after discharge to the transit sheds. Routine sampling was an important feature of this work; thus 1,013 samples of 109 different food products from 31 countries were obtained and sent to the laboratory for analysis. Sampling, in this manner, provides information concerning the quality and purity of imported food. It is a safeguard against faulty or careless processing and packing in the country of origin, and is essential to the detection of harmful metallic, chemical or bacterial contamination.

During the year 53 samples were reported to be unsatisfactory. An excess of chemicals or metals was present in 32 of these, 15 were affected by bacterial action, and a further 6 were contaminated with moulds, debris or dye staining. In each case appropriate action was taken in respect of the consignments from which the samples had been drawn.

The following were among the interesting features of port food inspection during 1959:

(a) Leakage in the hold of a coastwise vessel caused a considerable amount of wet damage to a transhipped consignment of tea. Some 450 chests were extensively affected and great care was necessary during subsequent reconditioning. This was done under the constant supervision of an inspector and 4½ tons of tea was condemned as unfit for human food. Upon production of the necessary guarantee the condemned tea was released for the extraction of theine and caffeine.

(b) Many parcels of canned foods were detained because of damage caused by bad storage and heavy weather at sea. All of these were sorted, and a complete examination of the tins was carried out, 9,363 tins of various foods being rejected during the year.

(c) The routine inspection of a small consignment of a brand of canned South African Stewed Steak showed that about 2 per cent of these tins were either "springers" or "blown". This percentage was considered to be too high and special attention was given to further parcels of the same brand when they were later discharged at Avonmouth. Numerous samples were sent to the laboratory and included among these was a tin which was stamped with a different canning mark. The laboratory reported that the contents of this particular tin was a mixture of beans, bits of liver, kidney, gristle, blood vessels, skin, hairs and a very small quantity of steak meat. The importers were informed and they immediately agreed to arrange a complete inspection of all parcels in store at the time, and to deal similarly with parcels then in transit from South Africa. Their concern was such that they at once sent a representative to investigate the matter at the canning factory in that country.

A full inspection of 5 parcels (over 20,000 tins) was carried out at the port and 132 extraneous tins, bearing marks similar to the mark stamped on the tin of sub-standard meat, were discovered here and there in the bulk consignment. A number of these were opened and they contained a mixture of the ingredients described. All were voluntarily surrendered for destruction. Inspection of later shipments, loaded after the first report of this occurrence, failed to reveal any tins with the unusual mark; furthermore no "blown" or "springer" tins were found.

(d) As a result of rough weather conditions and lack of spar ceiling protection a considerable number of containers were found to be broken, with resulting spillage, in a cargo of potatoes discharged at the City Docks. Included in the stow was a parcel of 400 labelled bags of "Arran" seed potatoes which had not been properly separated from the rest of the consignment. Printed on the labels were the words—"Washed and Treated—these potatoes are poisonous and must not be eaten."—on the sacks were the words—"NOT TO BE EATEN." A mercurial compound, poisonous to animals and man is used in the treatment of seed potatoes, but no trace of this substance was found in the potato samples sent for analysis.

Gathered up from the broken bags, therefore, was a mixture of treated and untreated potatoes. Normally these would be disposed of for stock feeding, but the importers were informed of the possible danger if the potatoes were eaten by animals. It was therefore agreed to use them for seed only. All

concerned with the stowage of these cargoes were advised of the importance of effective separation when parcels of eating or non-treated seed potatoes, and mercury-treated potatoes are stowed in the same compartment in ships or in warehouses.

(e) A consignment of 250 boxes of South African dried apricots was detained. Chemical analysis of samples taken showed that the fruit contained an excessive amount of sulphur dioxide. After consultation the consignees decided to export the fruit, which was afterwards loaded under supervision into a vessel at Avonmouth Docks.

Samples of Imported Foodstuffs taken during 1959 and sent to the Analyst or Bacteriologist for Examination

<i>No. of Samples</i>	<i>Description of commodity</i>	<i>Country of origin</i>	<i>Exam. for *</i>	<i>Result</i>
7	Apples (fresh)	Australia	C	Satisfactory
3	" " " " " " " "	Canada	C	"
14	" " " " " " " "	Lebanon	C	14 Unsatisfactory
1	Apple (rings)	U.S.A.	Con.	Satisfactory
1	Apricots (canned)	Australia	C	"
2	" " " " " " " "	Spain	BC	"
8	" " " " " " " "	S. Africa	BC	"
1	" " " " " " " "	Italy	C	"
2	" (dried)	S. Africa	Con. P	"
7	Asparagus (canned)	U.S.A.	BC	"
1	" " " " " " " "	Canada	C	"
2	Anchovies (canned)	Portugal	BC	"
1	Almond Nuts	Spain	B	"
3	Biscuits	Belgium	BC	"
5	Beans (canned)	Stores ex. S.A.	BC	5 Unsatisfactory
4	Beans sliced (canned)	S. Africa	C	Satisfactory
2	" " " " " " " "	Australia	BC	"
2	Bakers paste	Holland	BC	"
2	Beetroot (canned)	Canada	BC	"
3	Butter	Canada	Con.	"
2	Butter milk powder	Australia	BC	"
1	Cocoa butter	Holland	C	"
1	Cocoa cake	Holland	C	"
12	Crab (canned)	Japan	BC	"
4	" " " " " " " "	Norway	BC	"
2	" " " " " " " "	Formosa	BC	"
3	Cherries (canned)	Italy	C	"
46	Corned Beef (canned)	S. Africa	BC	2 Unsatisfactory
53	" " " " " " " "	Argentina	BC	5 "Satisfactory"
10	" " " " " " " "	Australia	BC	"
5	" " " " " " " "	Paraguay	BC	"
2	" " " " " " " "	France	BC	"
2	" " " " " " " "	Kenya	BC	"
4	Cheese	Swiss	BC	"
2	Carrots (canned)	Belgium	BC	"
6	Chicken (canned)	Holland	BC	"
1	" " " " " " " "	U.S.A.	C	"
3	Chocolate powder	Ireland	C	"
1	" flakes	Holland	C	"
1	" vermicelli	Holland	C	"
4	Cockles in vin.	Return export	C	"
1	Coffee beans	Brazil	Con.	1 Unsatisfactory
5	" " " " " " " "	East Africa	Con.	Satisfactory
2	Confectionery	Ireland	BC	"
4	Cream	Denmark	BC	"
4	Custard (canned)	Holland	BC	"
1	Currants	Australia	P	"
2	Egg yolk	Ireland	B	"

* See key at end of Table

<i>No. of Samples</i>	<i>Description of commodity</i>	<i>Country of origin</i>	<i>Exam. for *</i>	<i>Result</i>
2	Fruit salad (canned)	U.S.A.	C	Satisfactory
6	" " "	South Africa	C	"
12	" " "	Spain	BC	6 Unsatisfactory
2	" " "	Australia	BC	Satisfactory
1	Figs	Turkey	Con. P	"
1	Fruit dried mixed	U.S.A.	Con.	"
2	" " "	S. Africa	Con.	"
2	Gelatine powder	Holland	BC	"
5	Gherkins	Holland	BC	"
1	Gooseberries (canned)	S. Africa	C	"
2	Grapes (canned)	S. Africa	C	"
3	Grapefruit (fresh)	Israel	P	"
2	" (juice)	Israel	C	"
2	" (canned)	Israel	C	"
2	" " "	Cyprus	C	"
1	" " "	U.S.A.	C	"
1	Guavas (canned)	South Africa	C	Satisfactory
5	Ham and pork (canned)	Brazil	BC	"
2	Ham (canned)	Denmark	BC	"
2	" " "	Holland	BC	"
2	Herrings (canned)	Home market	BC	"
1	Jam, Apricot (canned)	S. Africa	P	"
1	Jam, loganberry (canned)	S. Africa	P	"
2	Luncheon meat (canned)	Australia	BC	"
4	" " "	Denmark	B	"
2	" " "	Holland	BC	"
3	Loganberries (canned)	S. Africa	C	"
1	" " "	Australia	C	"
1	Lard	Holland	Con.	"
4	Lamb tongue (canned)	Australia	BC	"
4	" " "	New Zealand	BC	"
3	Lemons (fresh)	Italy	P	"
1	Lemon (essence)	Italy	C	"
1	Lemon juice (canned)	U.S.A.	C	"
16	Mandarins (canned)	Japan	BC	"
2	Marmalade	S. Africa	P	"
3	Milk powder	Holland	BC	"
1	" " "	New Zealand	C	"
15	" " "	Ireland	BC	"
4	Milk full cream (canned)	Ireland	BC	"
55	" " "	Holland	BC	2 Unsatisfactory
17	Minced beef loaf (canned)	Australia	BC	Satisfactory
2	Mussels in brine	Denmark	BC	"
2	Morfar whipping	Norway	BC	"
8	Oranges (fresh)	Israel	P	"
3	" " "	Spain	P	"
10	" juice (canned)	S. Africa	C	"
3	" " "	Israel	C	"
1	Oleo stearine	Canada	C	"
1	" standard	Canada	C	"
1	Oxo foundation	S. Africa	C	"
14	Peaches (canned)	S. Africa	BC	"
5	" " "	Spain	BC	1 Unsatisfactory
1	" " "	Japan	C	Satisfactory
6	" " "	Australia	C	"
2	" " "	Canada	BC	"
3	" " "	U.S.A.	C	"
4	Pineapple (canned)	S. Africa	C	"
5	" " "	Australia	C	"
1	" " "	Kenya	C	"
1	" " "	Singapore	C	"
2	" " "	Formosa	C	"
3	" Juice	S. Africa	C	"
2	" " "	Australia	C	"
4	Peas (canned)	S. Africa	BC	"

* See key at end of Table

<i>No. of Samples</i>	<i>Description of commodity</i>	<i>Country of origin</i>	<i>Exam. for *</i>	<i>Result</i>
6	Peas (canned)	New Zealand	BC	Satisfactory
2	" "	Canada	BC	"
2	Pears (canned)	S. Africa	BC	"
1	" "	Italy	C	"
1	" "	Holland	C	"
2	Pork luncheon meat (canned) ..	Holland	BC	"
2	" " " "	Poland	B	2 Unsatisfactory
4	Pork kidney (canned)	Holland	BC	Satisfactory
2	" " " "	Holland	BC	"
2	" " " "	Czechoslovakia	BC	"
19	Pork sausages	Ireland	BC	"
2	Pork brawn	Denmark	BC	"
2	Pork and beef snack (canned) ..	Holland	BC	"
4	Prunes	U.S.A.	Con.	"
4	" " " "	S. Africa	Con.	"
1	Potato dehydrated	Holland	C	Satisfactory
36	Pilchards (canned)	South Africa	BC	"
3	Peel (cut dried)	South Africa	Con. P	"
3	" (mixed)	Australia	Con.	"
1	Paw paws (canned)	South Africa	C	"
2	Paté de foi	Denmark	BC	"
2	" " " "	Norway	BC	"
4	Prawns (canned)	U.S.A.	BC	"
3	Rusks	Holland	BC	"
2	Red pepper (sweet)	Spain	BC	"
2	Ravioli (canned)	Spain	BC	"
2	Risotte	Denmark	BC	"
2	Raisins	U.S.A.	Con.	"
2	" seedless	U.S.A.	Con.	"
1	" " " "	South Africa	Con.	"
3	" " " "	Australia	Con.	"
18	Sago	Malaya	Con.	"
3	" " " "	Japan	Con.	"
1	" " " "	Formosa	Con.	"
74	Salmon (canned)	Japan	BC	"
10	" " " "	Canada	BC	"
16	Steak stewed (canned)	Australia	BC	"
40	" " " "	South Africa	BC	15 Unsatisfactory
22	" " " "	Ireland	BC	Satisfactory
20	Steak (casserole)	Australia	BC	"
4	Sweet corn (canned)	South Africa	BC	"
4	" " " "	New Zealand	BC	"
2	" " " "	Canada	BC	"
1	Spaghetti (packet)	Italy	C	"
2	Sild (corned)	Norway	BC	"
1	Sponge fingers	Belgium	BC	"
2	Sardines (canned)	Portugal	BC	"
2	Soup stock	Argentina	BC	"
2	Soup veg.	Canada	BC	"
4	Sultanas	Turkey	P	"
1	" " " "	Australia	P	"
2	Tuna fish (canned)	Australia	BC	"
2	" " " "	Japan	BC	"
5	" " " "	Peru	BC	"
5	Tapioca	Malaya	Con.	"
55	Tomatoes (canned)	Italy	BC	"
4	" " " " juice	U.S.A.	BC	"
7	" " " " " "	Spain	BC	"
4	" " " " " "	South Africa	C	"
18	" " " " " "	Italy	BC	"
3	" " " " " "	Canada	C	"
3	" " " " " "	Italy	C	"
1	" " " " " "	South Africa	C	"
2	" " " " " "	Italy	C	"
11	Tea	Ceylon	Con.	"

* Key	Examined for
B	Bacterial contamination.
C	Chemical contamination.
Con.	Contamination.
P	Preservatives.

Miscellaneous Foods (Condemned)

Description	Reason for condemnation	T.	C.	Q.	lb.
Apples	Excessive chemical contam.			1	2
Barley	Wet and decomposed	20	7	0	0
Butter	Grossly contaminated		6	0	0
Cheese	Mould contaminated				15
Coconuts (whole) ..	Broken and mouldy		6	1	15
Coconut (desiccated)	Mould contaminated and dirty		7	1	4
Corn	Wet damaged and mouldy	29	8	0	0
Coffee	Mould contaminated		4	1	4
Dried fruit	Dirt and wet contaminated, insects, mouldy fermenting	2	11	2	25
Flour	Insect infested	1	7	3	20
Lard	Rancid, dirt contaminated		1	0	12
Maize	Wet damaged and mouldy	18	19	0	0
Milk powder	Contaminated			2	0
Rice	Dirt contaminated		1	3	0
Rusks	Rodent damaged and dirt				14
Tea	Mould contaminated	4	17	2	16
Wheat	Wet, decomposed, oil contam.	96	2	0	22
Total weight		175	1	1	9

Canned Goods (Condemned)

Description	Qty. Tins	Reason for condemnation	T.	C.	Q.	lb.
Apricot Pulp	18	Burst and blown		1	2	4
Fish	361	Burst and blown		1	2	6
Fruit	6,119	Burst and blown, rust holed, crushed burst	4	12	0	11
Fruit Juice	180	Crushed and burst		3	3	12
Jam	39	Crushed and burst			2	22
Meat	594	Crushed and burst		4	3	26
Milk Evaporated ..	20	Crushed and leaking				20
Tomatoes	435	Blown, rust holed, burst		5	0	23
Tomato paste	162	Crushed, burst, blown		15	1	15
Tomato puree	139	Crushed, burst, blown		8	0	15
Tomato juice	1,174	Crushed, burst, blown	4	13	2	7
Sliced apples	11	Burst			2	12
Vegetable	111	Crushed and burst		2	0	4
Total tins	9,363	Total weight	11	9	3	9

Meats (Condemned)

Description	Reason for condemnation	T.	C.	Q.	lb.
Lamb trimmings, beef offal, pork side ..	Mould and foul water contamination decomposed		4	2	21
Total weight of all foodstuffs condemned		186	15	3	11

Particulars of Foods Detained for Re-exportation or Re-conditioning at Local or Other Food Depots

Description of food			Reason for detention	Tons (approx.)
Butter	..	..	Wet damaged, dirt contaminated	6
Canned fruit	..	..	Crushed, burst, blown tins	63
Canned tomatoes	..	..	Crushed, burst, blown and rusted	20
Canned tomato paste	..	..	Crushed, burst, blown	6
Canned tomato juice	..	..	Crushed, burst, blown and rusted	14
Canned meats	..	..	Crushed, burst, blown and contents of tins not as declared	8
Cocoa	..	..	Wet, damaged and mouldy	33
Coffee	..	..	Wet, damaged and colour stain	9
Dried fruit	..	..	Wet damaged, mouldy, dirt contaminated and fermenting	26
Dried Milk Powder	..	..	Wet damaged, mould, dirt contaminated	18
Desiccated Coconut	..	..	Dirt, mould contam and rancid	17
Flour	..	..	Wet damaged, mouldy	31
Lambs	..	..	Dirt contaminated wrappings	16
Lard	..	..	Dirt contaminated, rancid	6
Rice	..	..	Wet damaged and mould, insect infested	14
Tea	..	..	Wet damaged and mouldy	41
Total weight				328

(3) *Smoke Nuisance*

When the Dark Smoke (Permitted Periods) (Vessels) Regulations came into operation it was anticipated that some time might elapse before all the measures relating to dark smoke emission would be enforcible, and that for the time being formal action would be taken only in cases where an offence had been the result of established negligence or utter disregard for the law. During this transitional period, it was thought, engineers and boiler room staff would have time to become acquainted with the requirements of the Regulations, and would also in time appreciate the need for efficient and constant attention to furnace fittings in order to keep the emission of smoke inside the prescribed legal limits. Port Health Inspectors co-operated in an educative capacity, and distributed notices containing extracts from these Regulations to all ships; they also gave oral warnings to Masters and Chief Engineers whenever the excessive emission of dark or black smoke was observed.

(a) *Black Smoke*

There has been a distinct improvement during the past eighteen months. Emissions are now much less frequent; they are invariably of short duration and due, in most cases, to "flashing" the boilers. Successful court proceedings were instituted for two offences during 1959. In each case black smoke had been emitted continuously and for prolonged periods from the funnel.

Both ships had been issued with the printed notice referred to above.

(b) *Dark Smoke*

Considerable attention has been given to emissions of this type and, as a result of observations carried out, 69 oral warnings were given in respect of 40 British and 10 foreign-owned ships. Only two of these ships were fitted with coal firing installations. The owners of six of the British ships were given written confirmation of these warnings and were advised to give immediate attention to defective machinery or fittings considered to be the cause of the smoke emission. It is suggested that some measure of improvement would be achieved if smoke observation mirrors were fitted in all ships boiler rooms. The operator could then tell at a glance whether any adjustments were needed to

stop undue nuisance from dark smoke. It is also felt that deck officers should be compelled to co-operate by glancing at the funnel from time to time in order to be able to notify the duty engineer whenever excessive dark smoke emission is observed.

(4) *Dock Sanitation*

Factories, Sanitary Conveniences

Frequent visits were made to inspect the sanitary accommodation in factories and dockside public conveniences. The general cleanliness and maintenance of fittings were on the whole satisfactory. Minor irregularities were discovered on eleven occasions.

In order to reduce the cost of water used to flush some of the conveniences at Avonmouth Docks, the Port Authority are removing the existing large tanks, which are timed to flush at regular intervals, and replacing them with separate flushing tanks in each W.C. compartment. As the pans in these compartments are not trapped with a water seal it will be necessary to watch for any nuisance likely to arise because of the reduced amount of water available.

The obsolete and insanitary urinal at Hotwells Dock has been replaced with a new structure which is artificially lighted and provided with modern urinal stalls.

Canteens

Defects discovered during the course of inspection at private and public canteens were relatively few in number and are summarized below:

Lack of general cleanliness	3
Defective drainage	2
Absence of hand washing notices	1
Inadequate kitchen ventilation	1
Insanitary garbage containers	3
Use of unclean or broken crockery	3
Failure to replenish first aid outfit	1
Proofing of canteen doors against rodents	1

These defects were at once brought to the notice of the management and were remedied immediately.

Upon request, the "Wheat Shed" D canteen was redecorated throughout, and laminated plastic tops were fitted to counters and tables. The West Wharf canteen extension was completed early in the year. The provision of impervious flooring, plastic topped tables and counters, together with electric heating has made it much easier to maintain a satisfactory standard of cleanliness and comfort at this canteen.

General Sanitation

The advantages of frequent, regular removals of accumulated refuse were observed at the docks during the prolonged period of warm weather experienced in 1959. Only three complaints about fly infestation were received during the year; these were of a minor type and were promptly dealt with. As an added precaution the Port of Bristol Authority readily agreed to spray all refuse bays at least twice a week with a residual insecticide. This worthwhile treatment was carried out regularly from June until September, and fly activity in the vicinity of the refuse bays was negligible.

(5) *Miscellaneous*

Bananas

As in previous years through the kindness of Messrs. Elder and Fyffes Ltd., your officers have been able to arrange for the distribution of gifts of bananas which were too ripe for storage. As stated last year, owing to the greater care and improved methods of storage the total amount has been less than in earlier years. However, the total in 1959 was higher than in 1958. The amount and distribution were as follows:—

Dr. Barnardo's Homes . .	1,021 lb.	Frenchay Hospital	448 lb.
Hortham & Brentry Hospital	490 lb.	Ham Green Hospital	1,064 lb.
Day Nurseries	336 lb.	Muller's Homes	224 lb.
Childrens Hospital	380 lb.	Southmead Hospital	504 lb.
			<hr/>
			Total
			<hr/> 3,967 lb. <hr/>

Port Development

To meet the demand of expanding trade the Port Authority has continued its programme of improving and extending the facilities for storage, handling and delivery of cargoes, especially at Avonmouth, which is the main shipping terminal. A large lorry loading bay was completed at the West Wharf rail sidings and another of a similar type is being built at the sidings running parallel to "R", "Q" and "S" Sheds. A single storey warehouse of considerable size, to adjoin "E" warehouse is also under construction. It is anticipated that in the coming year work will commence on a new granary which will have a tonnage capacity for 30,000 tons of grain. In addition, new pneumatic quayside discharging plant will be installed, and improved arrangements will be put into operation to expedite delivery of cargo to road and rail transport.

The work on the numerous new oil storage tanks and other ancillary installations which extend along the banks of the Severn beyond the Royal Edward Dock is almost completed. Consequently there is every likelihood of an increase in the oil trade. Because of this, the Port Authority has in hand a major scheme for improving conditions of discharge and providing a new berth in the oil basin for large oil carrying tankers.

THE WILLIAM BUDD HEALTH CENTRE

Introduction

With new counterpart agreements having been drafted and exchanged, the doctors and all concerned can now look forward to a long period of steady progress. There is still scope for expansion, including the continuing need for diagnostic facilities and the services of a consulting physician. Negotiations will be resumed with the South-Western Regional Hospital Board when conditions are more favourable.

Among the many visitors during the year were doctors from Israel, Moscow, Calcutta, Kashmir and Poland.

Staffing Arrangements

There has been a marked fall in the turn-over of staff since the early days of the Health Centre. Miss H. M. Anglin commenced as a clinic nurse in February last but is resigning to marry early in the new year. Fortunately a recently qualified nurse who did her pre-nursing training at the Centre is returning. Miss M. West came to Bristol as a clinic nurse in October replacing Mrs. Booth who resigned for domestic reasons in July.

Dr. E. P. O'Dowd, one of the founder firms, resigned at the end of June, and Dr. J. S. Hughes-Games was selected by the Medical Practitioners Committee in consultation with the Chairman of the House Committee as his successor.

Committees

The House Committee met on two occasions during the year, the 26th January and the 13th July.

With the renewal of the agreement for seven years between the Corporation and the Executive Council, there has been a tendency to drift gradually from official meetings of the House Committee with delegated responsibility for the routine day-to-day functioning of the Centre to a series of informal gatherings; for example, social meetings with the heads of schools in the vicinity, with the ancillary health workers, and regular case-discussions between the doctors over a buffet lunch.

This natural inclination to free itself from the "apron-strings" of the parent bodies is perhaps a welcome sign that the Health Centre has grown up and is able to stand on its own feet.

Discussions took place with the Chief Probation Officer regarding the use of the Centre for interviewing purposes. It is considered not inappropriate that the Centre should be used for this purpose since there is usually some element of mental ill-health connected with each case. The doctors agree that the probation officers are very co-operative and helpful in relation to specific cases passed to them.

Research Surveys

Through the Medical Officer of Health who has been appointed one of the two representatives of the Society of Medical Officers of Health on the Medical Services Review Committee, it is hoped that members of the House Committee may be able to submit their views on the working of a comprehensive health centre. It is hoped to collect evidence from the doctors, and the ancillary health workers and serious consideration is being given on how best to obtain the views of the patients.

Research is also being carried out on experimental lines of how best the various records of individual patients and perhaps the whole family can be incorporated into one folder.

Statistics

Whilst the Centre still theoretically serves a population of 30,000, the number of patients registered at the Centre has increased from 9,473 in November 1952 to 11,634 this with a reduction from six to five firms.

For the first year the Centre operated, the average number of patients seen by the general practitioners each quarter was 8,261; the average for each quarter of 1959 was 9,264.

Treatments carried out during 1952/53 were 2,507 per quarter, in 1959, 4,374.

During the same period referrals to hospital specialists increased from 68 to 101 per month. Emergency night and week-end calls rose from 12 for nurses and 33 for doctors to 32 for nurses and 54 for doctors for an average month.

Reports

(a) *Nutrition Clinic*

The Nutritionist continued to attend at the Centre for an afternoon and evening session most weeks. During the year 139 new patients were seen and total attendances were 736.

Obesity is still the reason for most referrals, but whereas when the service was first started, the majority of patients referred were middle-aged or elderly who had consulted their doctor concerning some other aspect of ill-health, there is now an increasing number of younger people seeking dietary advice solely on account of overweight, recognising that in itself it is a physical handicap and causes emotional distress.

(b) *Psychiatric Social Work*

This has been a year of expansion. Mrs. Gatliff, the present P.S.W. has worked four sessions weekly throughout. In two of these she interviewed patients at the Health Centre; the others were occupied in home visiting, discussion's with G.P.'s, and other staff, and the necessary administrative work.

Talks about emotional changes and fears in pregnancy have been given to several groups of ante-natal mothers who attended the Centre for mothercraft classes. These appeared to be helpful as they produced many questions and in one case resulted in a request for a further talk on emotional difficulties in young children.

During the period from January 1st—December 1st, 58 new cases were seen and 206 old ones attended for interview. Of these last, 73 were regular weekly appointments to help in special difficulties; 193 home visits were paid.

On October 1st the Child Guidance Service for the City was taken over by, and amalgamated with, the Health Department Service, under the name of Child and Family Guidance Service. This meant that disturbed children of school age could be referred for diagnosis, and, if necessary, treatment, so that the regular attendance of a children's psychiatrist and a psychologist became necessary at all clinics where psychiatric service was offered.

During December, therefore, Dr. Hugh Coulsting, and Mr. Walter King joined the existing sessions at the William Budd Health Centre, although the numbers of cases seen in that month were necessarily low on account of staff illness and the Christmas holidays.

In 1960 there should be a considerable increase in the total work, as those who refer children or their parents will be able to draw on the services of a full psychiatric team. It is hoped that in this way help will be made available for families who have hitherto been unable to attend Child Guidance Clinics on account of distance and transport difficulties.

(c) *Relaxation and Parentcraft Classes*

Relaxation classes are now an accepted part of ante-natal work, and are conducted by Miss Hogg, Senior Physiotherapist. There have been 42 classes and 265 attendances.

Parentcraft classes are held on the same afternoon at the Centre as the relaxation classes. There have been 37 sessions and 270 attendances.

Also there were two evening sessions for expectant mothers and fathers when films were shown. Thirty-two people have been present.

These sessions continue very successfully.

General Practitioner Work

At the end of 1959, there were 11,634 patients registered at the Centre, an increase of one since the last report.

Patients' Attendances at the Centre

Table 1 shows the attendance by each quarter for each general practitioner firm.

TABLE 1

Doctors	1 Jan.—31 Mar.		1 April—30 June		1 July—30 Sept.		1 Oct.—31 Dec.		Totals	
	1958	1959	1958	1959	1958	1959	1958	1959	1958	1959
A ..	3,481	3,916	3,263	3,296	3,041	3,205	3,406	3,295	13,191	13,712
B ..	556	631	441	591	449	500	564	546	2,010	2,268
C ..	2,469	2,836	2,278	2,264	2,276	2,076	2,453	2,226	9,476	9,402
D ..	1,106	1,421	918	1,129	952	1,351	1,102	1,469	4,078	5,370
E ..	1,553	1,816	1,473	1,509	1,364	1,403	1,480	1,576	5,870	6,304
Totals ..	9,165	10,620	8,373	8,789	8,082	8,535	9,005	9,112	34,625	37,056

Table 2 shows the volume of work undertaken by the nursing and medical staff in the minor surgery theatre (electro-cardiograms included).

TABLE 2

Doctors	1 Jan.—31 Mar.		1 April—30 June		1 July—30 Sept.		1 Oct.—31 Dec.		Totals	
	1958	1959	1958	1959	1958	1959	1958	1959	1958	1959
A ..	1,730	1,945	2,031	2,131	1,903	2,094	2,026	2,024	7,690	8,194
B ..	89	152	70	129	74	164	249	112	482	557
C ..	690	858	808	610	801	834	863	626	3,162	2,928
D ..	92	137	63	182	198	371	189	408	542	1,098
E ..	402	601	535	711	575	712	611	596	2,123	2,620
Totals ..	3,003	3,693	3,507	3,763	3,551	4,175	3,938	3,766	13,999	15,397
Schools ..	190	247	180	162	177	81	216	97	763	587
Casuals ..	310	363	374	354	362	508	338	296	1,384	1,521
Full Total	3,503	4,303	4,061	4,279	4,090	4,764	4,492	4,159	16,146	17,505

TABLE 3—General Practitioner—Maternal and Child Health Work

	1958	1959
Sessions	199	243
Mothers attended	1,489	1,374
Average	7.5	5.6

**TABLE 4—Number of patients referred to Hospital Specialists
(all doctors)**

<i>Year</i>	<i>Orthop.</i>	<i>Paed.</i>	<i>Phys.</i>	<i>Surg.</i>	<i>E.N.T.</i>	<i>Gyn.</i>	<i>Total</i>
1958	107	50	307	227	252	116	1,059
1959	134	53	319	296	258	151	1,211

**TABLE 5—Patients referred to Hospital Diagnostic Units
(all doctors and Local Authority)**

<i>Year</i>	<i>Chest X-ray</i>	<i>Haemoglobin</i>	<i>Blood Count</i>	<i>E.S.R. B.S.R.</i>	<i>Urine</i>	<i>Total</i>
1958	160	356	—	—	84	600
1959	104	414	1	—	62	581

Number of patients referred by all doctors for X-ray other than chest X-rays—
13 during 1959.

TABLE 6—Emergency Calls

<i>Year</i>	<i>Number of night calls— Doctors</i>	<i>Number of night calls— Sisters</i>	<i>Total</i>
1958	617	305	922
1959	645	378	1,023

Local Authority Work

TABLE 7—Maternal and Child Welfare

	<i>1958</i>	<i>1959</i>
Medical Officers' session	51	50
Mothers attended	453	297
Average	9.0	6.0
Midwives' sessions	51	44
Attendances	387	166
Average	7.6	3.8

TABLE 8—School Health

	<i>1958</i>	<i>1959</i>
School doctors' sessions	51	52
New children	379	204
Attendance	581	409
Average	11	8

THE DISEASES OF ANIMALS ACT

J. Allcock, B.V.Sc., M.R.C.V.S.

(Inspector under the Diseases of Animals Act)

Cattle Market

Nine pig sales were held at which 167 licences were issued for 402 pigs.

Notifiable Diseases

No cases of any of the diseases notifiable under the Diseases of Animals Acts were confirmed in the City during the year. Movement and other restrictions were however in force in the City because of diseases in the adjoining counties.

Foot and Mouth Disease

After the disease was found in pigs that had been in Gloucester Market a Foot and Mouth Controlled Area was declared by the Ministry of Agriculture on December 7th, which included the County of Gloucester and the City and County of Bristol. This prohibited the holding of markets except those for animals for immediate slaughter, and prohibited the movement of any cattle sheep or pigs from within the area to any place outside the area. Movement into the area or within the area was permitted only with a licence. These restrictions were withdrawn on December 17th. During the ten days of restrictions—which coincided with the Christmas Fat Stock Markets—366 licences were issued for 11,505 animals entering Bristol, 2,950 cattle, 4,548 sheep, and 4,007 pigs. The restrictions were brought into operation with no warning and a rather chaotic situation developed on the first day of operation. I would like to thank the farmers and wholesale butchers concerned for their tolerance in accepting the very considerable dislocation that these regulations caused. I would also like to express my appreciation of the efforts of my own clerical staff who dealt with many hundreds of extra phone calls and callers during this time.

On Sunday December 6th a report was received from the Ministry of Agriculture that sheep and pigs that had been in contact with foot and mouth disease had been sent to the Whitehall Abattoir. There were some forty cattle and eighty sheep in the lairs at this time. These were slaughtered and dressed at once and the whole of the lairs cleaned and disinfected by the afternoon of Monday December 7th. The Disinfection Squad from Feeder Road were responsible for this and did a very thorough job at short notice and in appalling weather conditions.

Swine Fever

Because of the spread of swine fever in the County, Somerset was declared an infected area from November 5th until the end of the year. Bristol was not included in the area but these restrictions led to the cancellation of pig sales in Bristol during this period. Twenty-five licences were issued for 106 pigs leaving Bristol to enter Somerset while the restrictions were in force.

Anthrax

There was one case reported of suspected anthrax during the year. Happily this proved negative but the suspected carcase—a pig—was disposed of by

burning by the Disinfection Squad using flame guns—this time it was on a Saturday afternoon and evening.

Fowl Pest

One suspected case was reported on December 24th. This proved negative.

Rabies

On June 23rd the Docks Police at Avonmouth reported that a dog had disappeared from the M.V. "Clyde Inventor"—an oil tanker. This vessel had been sailing between many ports where rabies is endemic and the dog was taken aboard at Teneriffe. The Docks Police made tremendous efforts to trace the dog—the found that arrangements had been made by some of the crew to send the dog to South Shields, they had booked a ticket for the dog at Temple Meads but the Railway Authorities had refused to accept an unmuzzled unaccompanied dog. Finally the next day the dog was found in a taxi having I believe spent the night in a house in Avonmouth. I took the dog to the Bristol Dogs Home which was licenced as a temporary quarantine station for the purpose. As a result of press publicity the National Canine Defence League offered to pay the fees for the six months quarantine that is required. On July 3rd I took the dog to quarantine kennels at Burnham where he spent his six months quarantine.

As it happened the dog was not infected with rabies but the criminally stupid escapade of attempting to land him illegally must have involved the various local authorities, and Ministry of Agriculture in expenses of time and telephones to a total well in excess of a hundred pounds. Had the dog been an infected one, human death or deaths of a very unpleasant nature could have resulted.

Pet Animals Act

As a result of inspections during the year I recommended to the Health Committee that two pet shops should not have their licences renewed. These recommendations were confirmed by the Committee. Until the present time it has been understood that once a licence had been granted to a Pet shop then that shop was free to stock any type and number of Pet animals from elephants to goldfish. This was a most unsatisfactory position as one could only say that existing conditions were suitable for the existing types and number of pets. Following discussion with the legal minds I am now beginning to specify in the licences to Pet shops what types and the maximum numbers of animals that can reasonably be kept in the particular premises.

Swine Fever Regulations 1959

These regulations made by the Local Authority under the Diseases of Animals Act 1950 govern the movement of pigs inside a market and prevent their being moved from pen to pen. They cover a detail which can be of great importance in preventing disease spread.

Sheep Dipping Regulations 1959

Made by the City and County of Bristol came into force during the year. These regulations bring the dates of dipping into line with the dates in Somerset and Gloucester i.e. July 1st to August 20th and make single dipping the only obligatory type.

General

Amongst other problems, I have been presented with bones in sauce by a lady who claimed that she had been served rabbit instead of chicken—and here was the evidence. With the help of the Department of Veterinary Anatomy I was able to report that not only were these bones those of a chicken but those of a young chicken. The Lord gives food and the Devil makes cooks.

One special order of the Ministry of Agriculture of September 28th is of interest. This authorized the landing of one giraffe and two waterbuck at Avonmouth.

There is one part of the Diseases of Animals Acts that is causing me some concern. That is the policing and enforcement of the regulations. This is not being done in a satisfactory manner. As an example i.e. the foot and mouth restrictions were in force, the Order required that the cattle being transported should be marked with a broad arrow clipped upon their back and that sheep and pigs should be marked with the letter M on their flanks in indelible marking material. This was hardly ever complied with. I did manage to stop one load of pigs but as there are two slaughter-houses as well as the bacon factories it is quite impossible for a check to be kept on a matter such as this unless there can be one person at each place of destination to do this. I am discussing this matter now with other departments and hope that some definite allocation of policing responsibilities can be arrived at.

Finally I would like to thank all various departments of the Corporation and the Police for the help that has been so freely given at all times through the year.

CARE OF THE AGED

Statutory Services

Housing Committee

Most bed-sitting room and one bedroomed flat accommodation is occupied by old people and details are given below:

(a) *Pre-war Estates*

There are 166 one-bedroomed flats on Bedminster, Knowle, and Southmead Estates; 96 flats, some part furnished, in the Central Area and 34 Council Houses have been converted to provide 68 one-bedroomed and bed-sitting room flats.

The rents range from 15/- to 22/6d. a week plus rates and water charges.

(b) *Post-war Programme*

By December 31st 1959, 2,013 one-bedroomed and bed-sitting room dwellings, mainly on the Hartcliffe, Stockwood, Withywood, Lawrence Weston and Henbury Estates, had been completed, and another 188 dwellings were being built.

The rents range from 20/- to 22/6d. a week plus rates and water charges.

The need for more housing of a kind suitable for old people has been emphasized in recent years but from 1945 until 30th September, 1959, one-bedroomed dwellings have formed only 8.9 per cent of the total amount of the post-war housing programme of local authorities in England and Wales. In Bristol post-war building and adaptations of pre-war houses had formed 9.8 per cent of the housing programme, until 31st March 1959, and this is likely to rise to just over 10 per cent by the end of March, 1960.

Welfare Services Committee

The Welfare Services Committee is responsible either directly or through the agency of voluntary bodies for providing residential accommodation for persons in need of care and attention; services to handicapped people including the blind and deaf, many of whom are old; safe-guarding the property of people admitted to hospitals or other institutional accommodation; burials or cremations where no relative can assist and meals to old and infirm people living in their own homes and the provision of club facilities for elderly people.

The details and capacity of accommodation provided under Part III of the *National Assistance Act* can be summarised as follows:—

100, Fishponds Road*	..	..	..	550
5, All Saints Road	..	..	..	18
119, Pembroke Road	..	..	..	20
159/161, Redland Road	..	..	..	27
14, Blenheim Road	..	..	..	21
9, Priory Road	..	..	..	25
Bourton Grange	..	..	..	42
"Gleeson House", Oldbury Court	..	..	..	46
"St. Peter's", Bishopthorpe Road	..	..	..	46
Totals	..	..	..	795

It is hoped that Snowdon Road, Fishponds, with accommodation for about 200 residents will become available for occupation in 1960.

* Excludes Temporary Accommodation.

The Department supervises 24 Homes for old people accommodating 554 residents registered under Section 37 of the *National Assistance Act 1948*, while 66 blind people live in three Homes administered by Bristol Royal Workshops for the Blind.

Advice on health matters is given and administrative health arrangements are made by the Medical Officer of Health on behalf of the Welfare Services Committee and nine general practitioners provide general medical services for the residents of the Council's Homes. The present standard charge for residents is £7 12s. 10d. per week.

Mobile Wheels Service

The mobile wheels service is provided on behalf of the Welfare Services Committee by the Bristol Old People's Welfare (Voluntary) Ltd., and the Womens Voluntary Service.

During 1959 the following meals were provided:—

20,068—by Bristol Old People's Welfare (Voluntary) Ltd.

11,741—by Womens Voluntary Service.

Health Committee

The Health Committee is responsible for domiciliary services for many old people including:—

Gerontology Clinic

Dr. R. J. Irving-Bell reports:

In July 1958, it was decided to start a Gerontology session at Charlotte Keel Clinic.

On Wednesday, November 26th 1958, the first morning session was held in conjunction with the Chiropody session which had been operating there for some time.

The number of aged persons attending at first was expected to be small, as the chiropodist would refer to the medical officer in an adjoining room only those who had some particular problem to discuss with a qualified medical person other than their own doctor. Information and advice on living conditions and the home would then be given by the medical officer.

During the year 1959, the number of sessions held at Charlotte Keel Clinic on Wednesday mornings was 46.

Number of new cases	31
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Total number of attendances	84
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No patient was referred by a general practitioner or the special health visitor responsible for the aged in the district. Many aged persons are not ambulant and unless transport is provided, cannot attend.

No medical examinations were made, but advice and information given, and visits to the patients home undertaken whenever required. Where necessary, home helps, home nursing, meals-on-wheels and laundry were arranged.

At the next visit of the patient to the chiropodist here (usually every two months), the Medical Officer saw the patient again, and thus a periodic follow up of the case was established. In future, the scope of the Gerontology Clinic may need to be widened, but it is difficult to know where to draw the line between the work of the clinic doctor and that of the patient's general practitioner.

Out of 31 persons attending the clinic in 1959, 29 were women including 19 widows.

Age Distribution

Ages 65 to 69 inclusive	=	7
„ 70 to 74	„	= 7
„ 75 to 79	„	= 9
„ 80 to 84	„	= 6
„ 85 to 89	„	= 2
„ 90+	„	= 0

Health Visiting Service

Four health visitors dealt particularly with the care of old people and had a total case load of 5,635 persons, 408 of whom were visited regularly. At the end of 1959, thirty-two people were considered to need admission, as soon as possible, to hospital and thirty-four to old persons Homes. During the year, 161 convalescent holidays were arranged.

Home Help Service

There were 12 full-time and 590 part-time home helps who assisted 2,198 old and chronically sick people and worked 584,060 hours in 1959 (i.e. 90 per cent of all hours worked by home helps).

Home Nursing Service

There were 77 full-time, 5 part-time and 10 student nurses. During the year, 4,380 people aged over 65 years of age were nursed in 164,343 visits; 58.8 per cent of all patients treated by the district nursing service were aged 65 years or more. The main types of cases dealt with were cancer; diabetes mellitus; diseases of heart and circulation; gastro intestinal; respiratory and senile. The average cost per patient treated was approximately 5/- per visit and £7 10s. 5d. per patient per year.

Laundry Service

In 1954 the Health Committee agreed to supply draw sheets and night gowns for incontinent old people and a Bendix washing machine and gas heater boiler were installed in the Disinfecting Station at Feeder Road. The service was much appreciated and in September, 1955 a second washing machine was installed.

The laundering is carried out by a home help and the Superintendent of the Disinfecting Station arranges the collection, disinfection and delivery of articles.

The growth of the service in subsequent years can be seen in the following statistics:—

1955	5,300 visits	8,546 articles laundered
1956	6,880 „	11,101 „ „
1957	7,835 „	17,305 „ „
1958	8,146 „	19,625 „ „
1959	8,353 „	21,637 „ „

During 1959, 249 sheets and 127 gowns were issued and 152 old people made use of them.

In addition the Health Committee contributes £250 per year to help maintain the laundry service provided by Bristol Old People's Welfare. The laundry is collected from various parts of Bristol and a paid worker

is employed in the laundry room at Feeder Road to operate the hydro-extractor, the hot air tumblers and the Permutit water softener. A part-time worker is in charge of the ironing.

Night Watcher Service

Twelve part-time members of the staff helped seventeen patients during the year, and a service of 10,000 hours was given. The payment to the attendant of 2/- per hour is made by the Health Committee.

Local Health Authority—W.V.S. Friendly Visiting

Members of the Women's Voluntary Services carry out friendly visits to housebound elderly, lonely people, who appreciate this service.

Samaritan Fund

In 1953 and 1955 legacies of £50 and £100 respectively were received as tokens of appreciation of kindness shown by members of the staff of the Department of Public Health and a Samaritan Fund was established. In December, 1959, the Health Committee allocated part (£140) of another legacy, made for similar reasons to this Fund.

Expenditure has been incurred on items such as chiropody, night watcher service, provision of cleaning utensils etc., for old persons, transport for a Christmas holiday for old people provided by a convalescent home at Burnham and miscellaneous small articles recommended by health visitors specialising in the care of old people e.g., hot water bottles, slippers, coal, thermos flask and a bell. The amounts spent in recent years are as follows:

1955/56	£9
1956/57	£14
1957/58	£16
1958/59	£24
1959/60	£26
	<hr/>
	£89
	<hr/>

The balance on 31st March, 1960 was approximately £221.

All suggestions for expenditure are considered and approved by the Chief Nursing Officer.

Voluntary Services

Bristol Old People's Welfare (Voluntary) Ltd.

This voluntary body which receives a grant of £400 from the City Council provides the following services:—

Accommodation

Stratheden containing 27 unfurnished "lettings" for able-bodied elderly people—men, women and married couples. A mid-day meal is provided.

Dulverton House containing accommodation for 18 frail ambulant women. There are 4 single rooms and the other residents share cubicked rooms.

Cote is similar to *Stratheden*, but is most suitable for the middle income group. There are 14 unfurnished "lettings" for able-bodied elderly people.

Chiropody

Two fully qualified part-time chiropodists were employed by Bristol Old People's Welfare (Voluntary) Ltd. They provided a service of eight sessions a week at Tower House, 10a, Whiteladies Road, and undertook four sessions a week at Charlotte Keel and Bedminster Clinics.

The City Council gave a grant of £350 to enable the service to be continued from 30th September 1959 until 31st March 1960 when the Health Committee will assume responsibility for sessions held in Corporation Clinics and make a grant to Bristol Old People's Welfare Ltd., for sessions held at 10a Whiteladies Road.

Friendly Visiting

Approximately 80 volunteers in the City help with shopping, mending, etc.

Holidays

Convalescent holidays subsidised from voluntary funds are arranged for about eighty infirm old people and about 1,500 able bodied elderly are sent for holidays in seaside hotels and guest houses.

Mobile Library

Fifteen volunteers take books by van to about 200 old people in their own homes. There is a stock of more than a thousand books and a loan charge of 1d. per week is made.

Miscellaneous Services

These services include assistance with clothing; the loan of blankets; wireless for the housebound; the loan of sick room equipment; comforts; advisory service and the distribution of fruit, flowers, firewood, etc.

Mobile Physiotherapy Service

This Service is organised by the Bristol District Nursing Association. During 1959, 497 patients were treated in a total of 6,424 visits by three physiotherapists. Treatment is recommended by general practitioners and by orthopaedic and other hospital consultants when patients are unfit to travel to hospital for treatment.

Each physiotherapist makes about six visits a day and the cost is estimated at about 10/- per visit. The average amount actually received from each patient is 4/- and the balance is made up by payments by the Ministry of Health for patients referred by hospital consultants, and as from the 1st January, 1960, grants from the Bristol Hospitals Fund up to a maximum of £5 per patient in a year.

Care of Handicapped People (Adults)

Local Health Authority Services

The Local Health Authority has a general responsibility for making arrangements for the prevention of illness and the care and after care of persons suffering from illness. These arrangements may include the provision of nursing aids in the home such as special beds, various items of nursing equipment and certain aids to rehabilitation e.g., hoists. They also provide health visitors to give education and help, subject to the general practitioner's wishes, to a patient

and his family on the implications of his disease, and home nurses to give any necessary nursing help. In the case of those suffering from mental deficiency or mental illness, there is also a specialised after-care service with mental welfare officers.

The Council's Eye Consultant conducts weekly clinics for the examination and registration of blind persons. A close "follow up and liaison service" as between the Bristol Eye Hospital Eye Clinic, the Bristol Royal Blind Asylum and the Medical Officer of Health's Department is provided through the appointment of a special health visitor from the Health Department, Miss M. Hatfield who has contributed the following report:—

The number of persons on the Blind Register now stands at 899 and the Partially Sighted 159. During the year 1959, the work of the Prevention of Blindness visiting followed similar lines as in previous years. The Blind and Partially Sighted clinics were held weekly and 78 blind and 42 partially sighted persons were registered. Two persons after successful treatment covering several years were removed from the register, one person at her own request after she had obtained employment. A number of patients were seen who did not qualify for registration but were in need of optical attention. These were referred to the Bristol Eye Hospital and I arranged their attendance there, on occasion taking them. With adequate treatment and in some instances, a change of spectacles, registration was not necessary.

One baby of three months was registered and is now awaiting admission to a Sunshine Home for Blind Babies. Another child of three years is also awaiting admission to a Sunshine Home. Two boys attending Westbury-on-Trym School for the Blind were found to have sufficient sight to enable them to return to a school for partially sighted children.

Day to day liaison continued between the Health Department, Bristol Eye Hospital and the Home Teaching Service for the Blind.

The follow-up of patients on the Glaucoma and Cataract Register at the Bristol Eye Hospital has continued and many patients have been seen and advised to continue treatment. Constant vigilance and encouragement needs to be given to these patients.

There is also a considerable amount of follow-up visiting with regard to children suffering from squints. In many cases, of course, the parents take the children regularly for orthoptic exercises but there are quite a number of parents who fail to keep their appointments.

All the services to the blind are provided under statutory requirements, and in their different spheres are subject to inspection and report by the Ministry of Education for educational services to blind persons, the ministry of Labour for the training and employment of adult blind persons in sheltered workshops, home-workers schemes or in open industry, and the Ministry of Health for all welfare services to the blind.

Services provided directly by the Welfare Services Committee

The Welfare Services Committee of the Bristol Corporation has certain responsibilities in connection with the welfare of persons who are permanently and substantially handicapped.

The Welfare Services Department provides welfare services for handicapped people other than the blind and the deaf. These services are mainly directed towards providing a wider social life than many of the handicapped people are able to lead without some organised assistance.

There is a thriving social club; limited pastime centre; home pastime service and general visiting. Holidays are provided for about 150 people annually. This is usually in groups and is not only tremendously popular but most beneficial. The Committee also undertakes structural alterations in the homes of handicapped people with a view to assisting them to overcome the effects of their disability. Simple household gadgets are also available and special equipment is provided to meet certain needs. The loan of mobile hoists is dealt with through the Health Department as this service is so closely associated with medical problems.

With regard to the provision of holidays these are usually taken fairly early in the year and it is necessary for recommendations to be received by the Welfare Services Officer during the first quarter of the year if at all possible.

The Welfare Services Committee has agreed in principle to the provision of a pastime/recreational centre for the general classes of handicapped. As soon as this is available the club activity and the pastime occupation will be considerably extended so that the many people whose names are now on the waiting list can be dealt with.

Services provided by Voluntary organisations on behalf of Welfare Services Committee

(a) *The Blind and Partially Sighted*

The General Superintendent, Mr. E. H. Getliffe, O.B.E., has sent me the following notes:

The City Council appointed the Bristol Royal Blind Asylum as their Agents for the purpose of administering the 1920 and 1938 *Blind Persons Acts* and the 1948 *National Assistance Act*.

Their services include the care of children under five years of age through the Home Teaching Service; the education of blind children in Kindergarten, Primary and Secondary Modern classes in the School for the Blind, Westbury-on-Trym, Bristol, where further education and technical training are also provided for pupils from sixteen to twenty years of age; the provision of training for newly blind adults and the employment of trained blind men and women in the Workshops for the Blind, St. George's Road, Bristol.

The Bristol Royal Blind Asylum administers and supervises the working of the Home Teaching Service and the Home Workers Scheme in Bristol. The service of residential accommodation for blind women training or in employment at the Workshops for the Blind is provided at the Hostel for Blind Women, where a few retired women workers are also resident under the arrangements for accommodation under Part III of the *National Assistance Act*. Three Homes for the Blind have also been provided, affording Part III accommodation to some sixty-five elderly blind men and women. These services to adult blind persons are provided under arrangement with the Welfare Services Committee of the City Council in fulfilment of the statutory requirements of the 1948 *National Assistance Act*.

The Workshops for the Blind provide employment for suitable blind persons in basket-making, mat-making, circular machine-knitting, loom weaving, chair-seating and wire drawn brush-making. The department which has been opened for engineering and other ancillary work has progressed considerably, and schemes are now being considered for the extension of this department.

The Home Teaching Service pays frequent regular visits to all blind persons in their homes, and seven social clubs for the blind meet weekly in different parts of Bristol. In 1958/9, 8,654 visits were paid to blind persons, 247 lessons in Braille, 249 lessons in Moon type and 353 lessons in pastime occupations were given by the Home Teachers; 617 visits to the deaf-blind were paid by the Deaf-Blind visitor, and 356 handicraft groups were taken by the Home Teachers. Additional to these individual services to blind persons, the Home Teaching Service organised 22 outings, in which 1,411 persons took part, and 8 weeks of communal holidays in which 206 persons shared the pleasures of such activity. The Home Teaching Service also arranges special parties for deaf-blind persons, parties for high-grade mentally defective persons resident in hospital or colony accommodation and visits blind persons who are temporarily or permanently resident in hospitals in the Bristol area.

Welfare work connected with partially-sighted persons is carried on through the Home Teaching Service to the blind and partially sighted.

At 31st March, 1959, there were 117 pupils and trainees in the School for the Blind, 75 employees and 4 trainees in the Workshops for the Blind.

(b) *The Deaf and Hard of Hearing*

The Rev. S. W. Hartnoll, B.A., B.D., Chaplain and Superintendent of the Bristol Institute for the Deaf has sent me the following notes:—

Deafness is a handicap with far more serious consequences than is generally recognised. The type and degree of deafness, often varying within the same individual as the years pass: whether present at birth or acquired: if congenital, whether by true heredity or not: the age of onset, which may be at any time during the person's lifetime: the cause of deafness—all these factors affect the consequences of deafness, but do not abolish them.

Deafness from birth seriously hinders the learning of language. Severe deafness makes normal speech practically impossible; even although it comes on after speech has been naturally acquired.

Conversation, communication, personal relationships all these are clearly linked with mental health and happiness; and all are interfered with for the deaf person.

Hearing aids are supplied free under the National Health Service, also service and batteries. But a hearing aid can never be an adequate substitute for hearing, and quite a number of persons are too deaf to benefit from an aid.

It follows from all this that many of those who are handicapped by deafness need services in addition to those provided for the "hearing" population, or provided under the National Health Service. They need specialised welfare services.

These are provided under the *National Assistance Act, 1948*. In Bristol, responsibility has been accepted by the Welfare Services Committee and this Committee has appointed as its agent the Bristol Institute for the Deaf.

The Institute is a voluntary society, founded in 1884. To begin with, it served only "the deaf"—formerly known as "the deaf and dumb". But in recent years, the scope of the work has been enlarged to embrace the deafened (often called, but rather inadequately, the hard of hearing);

and now it provides a comprehensive welfare service for all who are handicapped by deafness.

By arrangement with the Somerset and Gloucestershire County Councils, those in need of its services, who live just outside the City boundaries, are also provided for.

The Institute's centre is at 4 King Square, Bristol 2 (telephone 25868). Social and cultural activities are provided for "the deaf"; and, separately for "the hard of hearing" (the deafened: but some of them are totally deaf), The Chaplain/Superintendent and welfare officers (at present, three ladies) are responsible for a wide range of welfare services at the Institute and in the homes, helping the deaf and deafened in every possible way to live as full a life as possible.

Sunday services are arranged, separately, for both the deaf and hard of hearing.

Deaf people live in their own homes and earn their living in ordinary workshops and factories. At present, there is virtually no unemployment problem. In co-operation with the statutory bodies, the Institute renders useful service in the field of placement.

Classes in lipreading are provided for the deafened. The tuition given and the personal interest shown at these classes do much to counter depression resulting from the onset of deafness.

There is no problem arising from deafness, no problem indeed that a deaf person has to deal with, that the Institute's staff are not prepared to try to help.

In 1960, a start will be made with the building of a new Institute and Church on a vacant site in King Square (above the Church Army Hostel). The Institute's Committee has already raised over £20,000; and grants in aid have been promised by the three local authorities who use the Institute as their agent:— Bristol City Council (£25,000): Gloucestershire County Council (£1,000) and Somerset County Council (£400). It should be noted that about 90% of those on the registers live in the City of Bristol.

The Institute's registers contain the names of 812 persons of all ages: as follows:—

Deaf over 16 years of age	.. ..	343
Deafened or hard of hearing over 16 years		
of age	.. ..	369
Deaf and partially-deaf children	.. ..	100
		<hr/>
		812
		<hr/>

CIVIL DEFENCE RESPONSIBILITIES OF THE MEDICAL OFFICER OF HEALTH

Dr. H. Temple Phillips

(Chief Assistant Medical Officer of Health)

and W. J. C. Winterson

During the year the Department, through its appropriate officers, continued to study the problems in relation to the Casualty Services and Public Health, which would inevitably arise in war-time.

The Ministry of Health made arrangements in conjunction with the Army Authorities, to hold a Civil Defence course for a small number of senior public health inspectors at the Army School of Health from 6th to 8th April and the attendance of Mr. F. J. Redstone, the Chief Public Health Inspector, was requested. Against a general background of Civil Defence, the course covered problems likely to arise in the conditions following nuclear attack, such as field hygiene, water purification, monitoring of food and water supplies, and arrangements for dealing with the homeless.

Considerable re-thinking on the plans for the Hospital and First Aid Service in war-time, and the role of the Ambulance & Casualty Collecting Section, took place during the year, and Mr. R. F. Wood, the Chief Ambulance Officer, was invited to attend, during February and July, joint studies arranged by the Ministry of Health and the Home Office. Essentially, the purpose of the studies was to collate the conclusions of previous exercises on the operation of ambulances and F.M.A.U'S, and of a recent study on the operation of First Aid Parties, so as to produce an integrated scheme for the working of the casualty services, and to determine how they should fit into the structure of Civil Defence Control.

Mr. W. H. Shepherd, a Shift Leader in the Ambulance & Casualty Collecting Section, attended a Special Course for Officers at the Home Office Training School, Falfield, from 13th to 18th July. The course is designed for those who will hold officer's rank in the expanded war-time ambulance service.

Ambulance and Casualty Collecting Section

The highlight of the year was the outstanding success in June of the Bristol team in the National Civil Defence Competition. To attain first place on this "first ever" contest of its kind, in which teams took part from all over the country, was a great achievement. The Bristol team were 82 marks ahead of their nearest rival from Aberdeen. Arrangements were made for the team to travel to London on July 2nd, and the following morning they proceeded to Clarence House, where Her Majesty the Queen Mother presented the trophy and plaques to the individual members of the team. Whilst congratulating the team as a whole, we are naturally delighted at the part played by the members of the Ambulance and Casualty Collecting Section.

On the occasion of the dance and social evening held on April 1st, 1959, for members of the Section, the opportunity was taken to make a formal presentation of Colours to the Section. These were donated by Mrs. Flook to the Ambulance & Casualty Collecting Section of the Bristol Division in memory of her late husband, Albert Flook, who was an ambulance driver in the

First Aid Section during the last war and again volunteered when the Civil Defence Corps was reconstituted; he died some two years ago after a long illness. The courage and cheerfulness displayed by the late Mr. Flook during his duties under active war-time conditions were a source of inspiration to his colleagues in the St. George Sub-Division and to all those with whom he came in contact in the Civil Defence Corps.

Various exercises were held during the Spring months in conjunction with the other Sections and with the co-operation of neighbouring authorities, with a view to training the team for the National Competition to the highest point of efficiency.

Exercise "United"—2nd, 9th and 16th June—was an exercise in three phases planned with the object of exercising all the officers and members of the Ambulance Section in their various duties.

During the Summer months a number of exercises were held to test the officers and members of the Ambulance Section and to provide variety in training.

Exercise "Eject"—Sunday, 19th July—comprised a route-finding exercise, driving in convoy, and a visit to the Royal Air Force Station at Colerne. Here members heard a lecture by a R.A.F. Officer on "Rescue from Crashed Aircraft", followed by an inspection of different types of modern aircraft, with particular emphasis on emergency entrances, exit and ejection seats.

Driving instruction continued for a selected number of volunteers; 35 members were under tuition, of whom 10 had previous driving experience. 24 driving warrants were issued to successful candidates, authorising them to drive Civil Defence ambulance vehicles. In addition, advanced classes were arranged, during which instruction was given in vehicle maintenance.

As already mentioned earlier in this report, the composition of the Ambulance & Casualty Collecting Section and its active role in an emergency, was under review, and it became clear that some re-organisation would take place. Pending, therefore, a revised syllabus, training during the latter part of the year concentrated on First Aid, and some 150 persons attended the various classes that were formed. This gave all new members the opportunity to qualify in this important subject, and afforded the older members revision and practice.

The number of classes in First Aid and Home Nursing arranged for all the Sections of the Civil Defence Corps during the year, was as follows:—

				<i>Full First Aid</i>	<i>Home Nursing</i>	<i>Combined F.A./H.N.</i>
No of classes	..	..	..	13	2	2
No. of members attending	..	..	..	243	31	29
No. of members examined	..	..	..	159	15	—
No. of members passed	..	..	..	150	15	—

HEALTH EDUCATION

P. Mackintosh
(*Health Education Officer*)

Film Shows and Film Production

One of the most noteworthy features of the year has been the great increase in the number of film shows given. Altogether there were 240 recorded shows involving 360 screenings; this figure does not include the many occasions when the equipment was used for previews, so the total number of shows must certainly have exceeded 260. The average number of shows per month was 20, and the average number of screenings 30. The film equipment was thus in use on practically every working day of the year; on many occasions, two or three shows were given a day, and Saturdays and Sundays were not excluded.

Film shows at the parentcraft classes take place in our Clinics, but a great number have been given in schools, church halls, factories, stores and such places as the Dental Hospital, the Institute of Education, Wills Hall and various meeting halls of the many women's organizations in the City.

Arranging such a programme necessitates careful planning and whenever possible the equipment is conveyed to the place of showing by the normal transport arrangements of the Department. In order to carry out such a programme, it is necessary too, to have a number of persons available who can act as film projectionists, and six of the younger clerical officers and trainee public health inspectors have been trained by Miss Finch, the Technical Assistant, who is also responsible for arranging the film programme.

For the first time on record a 16 mm. sound colour film of the work of the Mental Health Section of the Department, was available for distribution. Details of this film entitled "Marlborough House" appear in the Mental Health Section of this Report, but it is worth repeating here that this film has done more to educate the general public in the problems of mental deficiency than any amount of publicity and lecturing could possibly have done. Audience reaction, after each showing has been carefully noted, and it has been truly amazing how the film has removed misconceptions from people's minds and brought a greater understanding of the problem of the child who mentally, never grows up.

The tremendous success of "Marlborough House" stimulated us to consider a second film and in conjunction with the South-Western Regional Hospital Board, the Bristol United Hospitals and the Education Department and with the same production team, the film "Claremont" was completed. This film is about Claremont School for Spastic Children and is following the same pattern of success as "Marlborough House", being among the ten winning films of the Amateur Cine-World's Award for 1959 and being received with acclaim at those meetings where it has so far been shown. "Claremont" will be available for hire in 1960.

A third film, entitled "The Helping Hand" about children with other forms of handicap will be made in 1960; the Department will then have a unique trio of films for use in its health education programme.

This venture into the fields of film production and hiring has already brought a considerable amount of extra work to the Health Education Section and some form of re-organisation of the work of the Section must be envisaged when copies of all three—and possibly other films—will be available for hiring; for example apart from the time and correspondence involved in arranging bookings and hirings there will have to be some system of checking and servicing the films when they are received back.

Other Visual Aids

Undoubtedly the Department is now well equipped with teaching aids, so that the educational work carried out by our doctors, health visitors and midwives and public health inspectors is not only much easier to perform, but more effective with audiences.

During the year there were two occasions when we were able to show the range of visual aids to public health inspectors and health visitors from other local authorities. From 9th — 12th April, a Refresher Course for public health inspectors from local authorities in the South-West, was held at Wills Hall. An afternoon session was devoted to a demonstration and talk on visual aids and exhibitions and this was carried out jointly by Mr. G. L. Whone, a senior district public health inspector and myself. This joint demonstration was a technique that we had not attempted before and it is pleasing to record that it was one which was well received by the audience. Neither speaker spent more than about 10 minutes on his particular topic and in this way, interest was maintained throughout a long session lasting about 2 hours. Questions were allowed as the demonstration was taking place. In this way, such topics as, the use of the blackboard, flannelgraphs, plastigraphs, hardboard and cardboard triptych displays, slides—making and mounting—, filmstrips, the use and misuse of posters and charts and the display of propaganda literature were covered in the session. Particular attention too was paid to the selection and cost of materials, as well as the limitations of certain aids.

It was evident from the audience's reaction that many of the things shown to them were new and that many of the ideas and techniques would later be used in their work.

A similar demonstration was given by myself to about 60 health visitors at Manor Hall, on 16th July during a Refresher Course organised by the Royal College of Nursing.

Health Education and the Public

Health education is still defined by many people, as "the display of health posters, the distribution of health propaganda and the occasional organization of a health exhibition". But these things are merely some of the tools of the health educator and in the many attempts that have been made to evaluate health education, the mistake has been made of evaluating the individual tools and not the things which the tools are used to construct. It was stated in last year's Annual Report that health education "was not spectacular"; neither does it achieve rapid results. In order to assess the true value of health education, one has to look at the improvement—or otherwise—of the health of the general public, not just over the past few years, but over a generation. In this respect, the Annual Report for 1938 makes interesting reading when compared with that of 1959.

In 1938 the Infant Mortality Rate was 41·6 per thousand and the Maternal Mortality Rate 3·65. The comparative figures for 1959 were 20 and 0·29. In his Report for 1938, Dr. Parry wrote "It is regretted that greater advantage is not taken of the *free immunization* scheme against diphtheria, that has been operating in Bristol for the *last ten years*"; and in that same year there were 647 notifications of the disease in the City, with 630 cases admitted to hospital and 22 young lives terminated. By comparison 1959 was the 10th consecutive year with no confirmed cases and the 12th consecutive year when no deaths were attributed to the disease.

Consider now, poliomyelitis; 24 cases were reported in 1938, with two deaths, but it was during the post-war period that the disease became more

prevalent in the City, an increase which may have been partly due to improved methods of diagnosis. The peak years were 1950 (266 cases) and 1955 (158 cases) and practically the only defence we had against the disease was the maintenance of a high standard of personal hygiene.

In 1956, however, the issue of a vaccine was started and although supplies were very limited at first and despite the administrative difficulties of operating the scheme, as well as the later choice of vaccines offered to parents, now, three years later a high proportion of the age groups affected have been vaccinated. Surely this represents a tremendous change of attitude by the public in a generation! Here is a free vaccination scheme quickly being taken up by the public, and although we may feel disappointed sometimes at the response of the public to a particular campaign, looked at over a period of years, the results are very much better now than they were a generation ago.

Similar examples can be quoted in respect of other diseases: in the case of tuberculosis, for example, B.C.G. vaccination of child contacts started in 1951; three years later a scheme of vaccination for 13-year-old school children was started and it is now an accepted part of the School Health Service with parents taking full advantage of the scheme.

It may be argued that the general improvement in the health of the younger generation, with the virtual conquest of some diseases, can be attributed to better social conditions and improved medical services; but it should not be forgotten that it is health education which has produced these conditions and services, and that an essential part of health education is to teach individuals how to utilize these services. To this end, doctors, health visitors, midwives, public health inspectors and all who work in the field of preventive medicine are constantly striving. The results of their efforts during any one year may not be encouraging, but the results over a period of years show the true measure of health education.

During 1959 the public health inspectors have continued to play an important part in the health education programme, and the Chief Public Health Inspector reports:—

“Health education is enjoyable work because of the enthusiasm which is shown by those to whom talks and demonstrations are given. As a nation we tend not to worry about anything until it happens but the increasing intolerance of the public to insanitary environment demonstrates a desire for healthy living and for action, by way of preventive measures, to avoid ill-health and disease. People are becoming particularly conscious of unhygienic handling of food and are not reticent about complaining to the Public Health Department, or indeed of speaking up themselves in food premises where they consider that hygiene is not up to standard. This is indeed a sign of the times and proof of the value of health education.

“Among the institutions where talks are given are Teachers’ Training Colleges. It is encouraging to find that once the seed is sown a considerable number of trainee teachers choose aspects of environmental health as a subject for further study.

“Health education has many avenues through which the public can be informed. Exhibitions and displays on clean air, clean food, pest control and the environmental health services generally were prepared during the year and set up in the Civic Advice Bureau, Health Clinics, Y.M.C.A. and a Teachers’ Training College. These attracted a great deal of attention and interest.

“The use of the film strip has long been accepted as a useful teaching aid, but it has one unfortunate feature. In many cases it does not depict

local circumstances. The Chief Public Health Inspector has over the years adopted the policy of having photographs taken of good and insanitary conditions. The photographs, many of them of historic value, are being re-photographed and a slide library is being prepared which will provide a flexible collection of teaching matter suitable for the illustration of talks.

"A monthly Corporation publication called "Civic News", was entirely devoted on one occasion to a description of the Environmental Health Services.

"During the year talks were given to:—

	<i>Total No. present</i>
Trainee teachers and school children	392
Staff, 100 Fishponds Road ..	76
General public	611
Food Trade	117
School meals services	274
TOTAL	1,470

Films were shown on 32 occasions and film strips were used in 17 instances."

Ten Years' Old

It is now ten years since a full-time officer was appointed to co-ordinate health education. Since 1959 represents the fifth completed year since I have held the appointment, it may be worthwhile reviewing very briefly a few of the developments during that period.

By 1956, the nature and volume of the work were developing in such a way that it was decided to create a Health Education Section, consisting of myself, a Technical Assistant and the Nutritionist.

In October of the same year, the Medical Officer of Health began the publication of his Monthly Bulletin and since then it has continued to appear regularly, its original circulation of 400 copies now doubled. Undoubtedly this publication has proved to be one of the best educational media that the Department has produced.

In January 1957 the Bristol Home Safety Council was set up with a total membership of 30 statutory and voluntary organisations. Since then, the Council has actively and consistently campaigned in the cause of home accident prevention and the reports of its activities have appeared as an Appendix to this report. Recently the Council was elected by the other Home Safety Committees of the South-Western Counties, to represent them on the newly organized National Home Safety Committee and as the work of the Council has become more widely recognized, other organisations have joined, so that now there is a total membership of 45. The Council has its own Constitution and holds regular quarterly meetings; an elected Committee meets each month to plan and discuss methods.

During the past five years, we have continued to equip our Clinics with the necessary "tools" to carry out health education. We have added to our film and film strip library and established a valuable and growing collection of slides for use by members of the Department. Other teaching aids such as flannelgraphs and plastigraphs have been obtained or made, and the staff encouraged to use them. Film production, referred to at the beginning of this report is another new venture of the Public Health Department and one in which the Health Education Section is likely to become deeply involved. It

has become the practice to be on the "look-out" for developments in the general field of education for information, new techniques, and new equipment which may be of use in or applicable to our health teaching. In this and other ways, for example, the receiving of many foreign visitors each year,—the Section has been able to build up a useful store of information on the health and social services and has become virtually an information centre and "clearing house" for the Department. Through our work many valuable contacts have been made and in this field of public relations we have been able to interest very many people and organizations in the promotion of health, people and organizations who are willing to help in our work.

It has been an interesting and at times, stimulating period and we look forward to the future.

Home Safety

The following two reports covering the main activities of the Home Safety Council, during the year, were presented to the health Committee.

January to June, 1960

1. Constitution

At the Annual General Meeting of the Council in January the revised Constitution was adopted. The most important change was that a permanent advisory panel was appointed by the Council, composed of representatives of certain public and statutory organisations and certain specialists. The representatives may attend all Committee and Council meetings and shall have power to vote. The Advisory Panel consists of representatives of the following:—

Royal Society for the Prevention of Accidents,
Health Department,
Education Department,
City Architect's Department,
Housing Department,
Fire Brigade,
South-Western Gas Board,
South-Western Electricity Board,
Women's Advisory Council on Solid Fuel,
Surgeon-in-Charge, Plastic Department, Frenchay Hospital.

2. Home Safety Talks

During the six-months ending 30th June the members of the Speakers' Panel gave 40 talks on the prevention of home accidents to various organisations in the City. The speakers are now quite practised in the use of visual aids and these serve to make the talks more effective. On the 16th March the Deputy Medical Officer of Health spoke on "Falls" at a Rotary Luncheon.

3. Accidental Falls

The Council have decided that this year the main emphasis of its efforts should be to focus public attention on the necessity to prevent accidental falls. Over half of the home accident deaths occur as the result of a fall. A letter was sent to the Secretary of the Chamber of Commerce inviting members to take part in the campaign, with the following results:—

- (a) All ironmongers' shops displayed suitably designed posters and distributed 6,000 copies of a cyclostyled questionnaire relating to falls.

- (b) Lewis's Stores displayed posters.
 - (c) The Co-operative Stores staged a window display at the Castle Street branch.
 - (d) An exhibit was arranged in the City Information Bureau.
 - (e) All the City Clinics displayed appropriate posters.
 - (f) All three local papers published articles on the prevention of falls in the home.
 - (g) Suitable posters and questionnaires were distributed to 200 schools.
- Furniture stores were invited to co-operate but little enthusiasm was shown; it seems that an accidental fall is not dramatic enough to stir people's imagination.

4. *Oil Heaters*

Arising from the number of accidents caused by oil heaters, correspondence with the British Standards Institution revealed that over 100 firms manufactured oil heaters, but only 2 have the B.S. mark and application had been made to the British Standards Institution in respect of 3 more. Further correspondence with individual manufacturers informed the Council that an Oil Burning Apparatus Association was being set up to explore the whole matter of safety and it was hoped before the autumn to publish a list of safe oil heaters.

The speakers have been asked to draw the public's attention to the need to check safety precautions when purchasing oil heaters. In Bristol alone in 1958, 58 fires were caused by oil heaters and in the first two months of this year 15 fires were attributed to the same cause.

5. *Cinema Publicity*

The Rex and Kings Cinemas staged a small home safety display during the showing of the film "Life in Emergency Ward 10". It is pleasing to record that the film distributors produced a poster advertising the film and incorporating the national slogan and symbol "Guard that Fire".

6. *Representation on National Home Safety Committee*

Under the reorganised National Home Safety Committee, Bristol Home Safety Council was elected by postal ballot to represent the 9 Home Safety Committees in the South-Western Region. This will mean that the Chairman or one of the officers of the Council will attend the National Committee meetings four times a year, in London. The Chairman attended the first meeting on the 16th April. The Council feel that attendance at national level discussions is an important step forward.

7. *Home Safety Exhibition*

For the second consecutive year the Home Safety Council staged an exhibition at the North Somerset Agricultural Show. A spacious marquee was shared with the Long Ashton Road Safety Committee. We were privileged to be able to exhibit the first of a series of new exhibition stands produced by the Royal Society for the Prevention of Accidents. The stand contained a number of domestic scenes in each of which some member of the household was accidentally falling. An electrically operated push button quiz panel was incorporated. This stand, together with other exhibition material used on previous occasions, aroused considerable interest and those persons who staffed the stand were most enthusiastic about the interest displayed by the public. More questions were answered

and more propaganda material was issued than on any other exhibition staged by the Home Safety Council. The stand was staffed by Miss Gibb and Miss Duncan of the Home Safety Council, Dr. Aldwinckle—a member of the Speakers' Panel—Mrs. Prewett, representing the Mothers' Union and Miss Flower, a member of the Soroptomists.

8. *Dairy Show*

Posters were displayed at the National Dairy Show in 4 Bristol parks in June.

July to December 1960

1. *Death of Chairman*

It is with the deepest regret that we record the untimely death in July, 1959, of our Chairman, Mrs. E. M. Boyce. The successful launching of the Bristol Home Safety Council was very largely due to her efforts and her charm, enthusiasm and leadership will be greatly missed.

It was felt that the election of a new Chairman should be postponed until the Annual General Meeting in January, 1960: the Home Safety Council is indebted to Alderman Mrs. Nutt of the Health Committee who has acted as Chairman during the past six months.

2. *"Haphazard House"*

During the Summer, the Health Committee approved the expenditure of £124 for a display unit known as "Haphazard House". The unit represents the interior of a house in each room of which an accident is occurring. One of the side panels of the unit consists of a "push-button" questionnaire panel and viewers can assess their own standards of safety by pressing the electric push-buttons. "Haphazard House" formed the centre piece of the Home Safety exhibit at the Bristol Flower Show in September, where the unit aroused considerable interest. It has since been on view in schools and clinics and will continue to be shown in the future.

The Home Safety Stand at the Flower Show was again staffed on successive days by members of the Mothers' Union and the Bristol North-West and Bristol Castle Federations of Townswomen's Guilds. We are indebted to these members for their enthusiasm and activity and the manner with which they dealt with the many enquiries. We should, too, like to record our appreciation of the loan of "Safety Sam"—a figure constructed of fire-guards—from the South-Western Gas Board and for the floral decorations provided by the Parks Department.

3. *Anti-litter Campaign*

For two weeks prior to the August Bank Holiday an unusual window display was staged in the City Information Bureau. The exhibit was quite stark—a mound of broken glass and mounted alongside a giant letter addressed "Dear Passer-by". The letter drew the readers' attention to the dangers of broken glass and appealed for the public's co-operation in keeping our parks and open spaces free from broken glass.

A new poster "Cuts can Cripple" was displayed in all Bristol schools and clinics, on Police Station notice boards, housing estate notice boards and on boards and pavilions in the parks.

4. *Guy Fawkes Day*

Posters urging care in handling fireworks were distributed by members of the Bristol Fire Brigade in the course of their visits of inspection to all shops licensed to sell fireworks. Posters were also displayed in all schools, clinics and estate offices of the Housing Department. A window display in the City Information Bureau, which included a life-size "Guy", was also arranged.

5. *Christmas Home Safety Posters*

No new posters on "Christmas Safety" were produced by RoSPA. The Health Committee approved the expenditure of £31 14s. 0d. for a special poster, designed and produced locally. The poster was in the form of a Christmas and New Year greeting; over 700 copies were distributed to various organizations and institutions in the City. Two of the large stores in Bristol attractively mounted the posters and incorporated them in their Christmas displays.

8. *"Check that Fall" Campaign*

The Royal Society for the Prevention of Accidents has asked all Home Safety Organizations to take part in a campaign designed to "Check that Fall" The Campaign began in October, 1959, and for three months the emphasis was to be on falls involving elderly people, followed by the first three months of 1960 devoted to the prevention of falls by housewives, handymen and the very young. In connection with the first part of the Campaign, RoSPA issued "quiz" cards, designed to be used in talks given to groups of pensioners or elderly people. The Home Safety Council felt that the questions asked on the cards might be resented by some elderly people and that some of the questions were ambiguous. It was decided to conduct the quiz in a few pilot groups and the response was as expected. The quiz method has, therefore, been rejected when giving talks to groups of elderly people.

9. *Speakers' Panel*

During 1959, members of the Speakers' Panel gave 59 talks on the prevention of home accidents. Speakers are making increasing use of visual aids, the Home Safety Flannelgraphs being particularly popular; three copies of this flannelgraph and one dealing specifically with burning accidents are in regular use. These and other aids, such as filmstrips, posters and leaflets, are used too by teachers and various youth group leaders. It is most gratifying to record that there seems to be an increasing interest in home safety by people who are associated with the teaching and training of young people. Following a talk given to domestic science teachers by Miss Dane of the Education Department, many teachers have come to the Central Clinic asking for advice and information and teaching aids. Several schools had special Home Safety displays and two of our speakers spent a whole morning at Redfield Secondary Modern Girls' School. A number of secondary modern school children, who are taking housecraft as a subject in the secondary school certificate examination, have written or called asking for material to make folders on home safety. Girls Life Brigade leaders have also asked for information and it is pleasing to note that Home Safety is now included in the work to be done for a Wolf Cub Badge.

The Youth Services Committee have a panel of speakers who cover various topics. At the request of the Youth Services Officer, the Home Safety Council's Panel of Speakers will deal with Home Safety talks to youth organizations.

10. *New Film—"Fabrics and Fireguards"*

A new sound colour film entitled "Fabrics and Fireguards" and produced by Slough Accident Prevention Committee was seen by members of the Home Safety Council in November, 1959. It was felt that the film was an excellent production with an appeal to an extensive audience. The Health Committee have since approved the purchase of a copy of the film at a cost of £35, on the understanding that it would be shown regularly in parentcraft classes and infant welfare sessions as well as to other audiences in the City.

11. *National Home Safety Committee*

Throughout this period, Bristol has represented the South-Western Area in the National Home Safety Committee and two quarterly meetings of the National Committee were attended in London. On the 28th September, a meeting of representatives of Area Home Safety Committees took place at the Central Clinic. Although only four committees were able to send representatives, the meeting proved to be useful and constructive and it was felt that further meetings should take place in order to plan campaigns on an area basis.

Towards the end of the year the number of Home Safety Committees in the Area had increased by three and the Area was thus entitled to an additional representative on the National Committee. The result of a postal ballot was that Cheltenham was elected to the National Committee.

12. *Fire Prevention Handbooks*

An extremely useful handbook, entitled "Fire Prevention" was produced by the Bristol Fire Brigade in the autumn of 1959. Copies of this handbook were distributed to all member organizations of the Home Safety Council and to members of the panel of speakers.

13. *Danger at Play*

During the year, the Portsmouth Junior Chamber of Commerce conducted an investigation into accidents caused by toys. Copies of the survey were received and Miss Daphne Hubbard, of the Bristol Evening Post, reviewed the publication in her column.

14. *Oil Heaters*

There has been considerable public concern in recent months about the number of fatal accidents which occur in connection with domestic oil heaters. For some considerable time now the Bristol Home Safety Council has been urging—both at National and local levels—that oil heaters should conform to specific safety standards. Early in 1959 we were in correspondence with the House of Commons Home Safety Committee, the British Standards Institution, the Oil Appliances Manufacturers' Association and individual manufacturers of these appliances. We discovered that there were over 100 manufacturers of oil heaters, yet only two firms held licences from the B.S.I. to use their certification marks.

The tragic incident in which five children died as the result of an accident with an oil heater undoubtedly brought matters to a head, for towards the end of 1959 we learned that the Home Office is to set up a Committee to discuss the revision of the existing British Standard and to conduct a thorough investigation into the design and use of oil heating appliances. We understand, too, that investigations are to be carried out by the Department of Scientific and Industrial Research and by the manufacturers' Association. This information, together with a warning that carelessness is the principal cause of accidents with oil heaters and a list of instructions on their proper use, was conveyed to the press in a letter from the Secretary of the Bristol Home Safety Council, which was published in mid-December in all three local papers.

15. *Acknowledgments*

Members of the Home Safety Council wish to record their thanks and appreciation to the Health Committee for their support in the work of accident prevention. We should like to record too our gratitude to our local newspapers, the *Bristol Evening Post*, the *Bristol Evening World* and the *Western Daily Press*, for the amount of publicity that is given to our activities and to all those individuals and organizations that have helped us in our endeavours to make "home" a safe place.

INTRODUCTION

I have much pleasure in presenting the Annual Report of the Bristol School Health Service for 1959, the 52nd report of the series. Though no new clinics were actually opened during the year, the clinic at Withywood, to serve the extensive housing estate in that district, had been nearly completed at the end of the year and was expected to open early in 1960. This clinic will provide medical and dental services for the school children of the district, and also maternity and child health services.

In his report on the work of the Child Guidance Clinic (page 3) Dr. Barbour gives a brief history of the progress of the child guidance service in Bristol since its inception in 1936. He describes the administrative changes which took place in October, 1959, when the family guidance service which had been set up by the Health Committee was integrated with the child guidance service of the Education Committee. The combined service is known as the child and family guidance service. It will operate from the Child Guidance Clinic building at Brunswick Square, and also from six other clinics in various parts of the City. Eventually, as Dr. Barbour explains, it is proposed to divide the City into zones, each having its own team of psychiatrist, psychologist and psychiatric social worker. These arrangements will make for the most efficient use of the staff and will provide a much improved service for the outlying areas of the City. In order to simplify the administration, the members of the Child Guidance Clinic staff previously on the establishment of the Education Committee have, with the exception of the educational psychologists, been transferred to the establishment of the Health Committee.

The dental staff position continues to cause much anxiety. During the year two dentists were appointed but these both resigned towards the end of the year, and four other resignations from the full-time staff were received. These officers resigned either to enter private practice or to go to other Authorities. As Mr. McCaig, Principal School Dental Officer, points out in his report (page 8) one of the main reasons for the failure to attract newly qualified dentists to the school health service is the much more attractive financial prospects of private dental work. These staffing difficulties are of course felt by most Authorities throughout the country, and until the problem can be solved on a national basis there is little hope of a really adequate school dental service. We have tried as far as possible to induce private dental practitioners to give sessional service to the Authority, and altogether 915 sessions were given in this way during the year. Good working conditions are another important factor, and during the year the Committee gave approval to a programme of replacement and modernisation of the equipment of the dental clinics to cost £6,000 over the next five years.

In the report on educationally sub-normal children (page 19) Dr. Boulton gives an interesting account of an investigation which was carried out during the year at Henbury Manor School for junior educationally sub-normal children into progress of children in reading.

Mention was made in the Report for 1958 of the campaign which was undertaken in that year in one area of the City to try and reduce the incidence of head infestation among children at a group of schools in that area. This campaign seems to have had some permanent good effect, and this problem happily seems to be generally diminishing, the percentage of children in the City having been found to have verminous heads, however slight, being 1.9 per cent of the school population, which is the lowest so far recorded. There is

inevitably a small group of special families from which most of these cases now arise, and these need the unremitting care of the health visitors and schools staffs to try and maintain a good standard of cleanliness of the children's heads. There is often some factor in these families, mother's poor health or possibly low mental ability, which makes it difficult to take legal action. These cases are however being constantly supervised by the health visitor and if necessary appropriate legal action will be taken.

In his report on the psychological service, Mr. Saunders, the Senior Educational Psychologist mentions the progress that is being made to cope with the problems of educational retardation in school children. He describes the in-service training unit which has been set up at Hillfields Park School to provide specialised training for teachers who are to undertake the work of teaching these children.

Dr. M. R. Alderson, one of the Assistant Medical Officers, has taken a special interest in speech therapy work and on page 43 he gives a brief history of the progress of speech therapy amongst school children in this country.

Miss C. E. Cooke, Senior Woman Organiser of Physical Education, contributes a further report on accidents amongst school children (Appendix A).

Our good relationships with the hospitals and the general practitioners of the City have continued during the year, and these help in a great measure the smooth and efficient running of the service. Any recommendations for consultant advice which are made by the School Medical Officers are referred to the child's general practitioner before action is taken.

Our thanks are again due to Mr. G. H. Sylvester, Chief Education Officer, and his staff, particularly the teachers and the school welfare officers, for their invaluable help in many ways concerning the health and well-being of the school children of the City. The Heads and staffs of schools are called upon in many ways to assist with health matters, and their co-operation is always most willingly given.

I should like also to express my thanks once again to Dr. A. L. Smallwood, Senior Medical Officer of the School Health Service, for his help in preparing this Report, and to Mr. J. H. Middleton for his help in collating and editing the contributions.

R. C. WOFINDEN,
*Medical Officer of Health and
Principal School Medical Officer.*

CHILD GUIDANCE CLINIC

R. F. Barbour

The year 1959 marks the end of a chapter of Child Guidance in the City of Bristol. The introduction of the service in 1936 was largely due to the work of a group of interested lay people and especially to the enthusiasm and energy of the Hon. Lady Inskip.

The pre-war years saw steady growth, with several psychiatrists including Dr. Frank Bodman, Dr. Doris Heron and Dr. Thomas Ling working on a voluntary basis. During the Director's 5½ years' absence on military service, the work of the Clinic was carried on by Dr. Frank Bodman. Miss Dunsdon replaced Dr. Ruth Griffiths as psychologist, and the senior psychiatric social worker was Miss Janet Glover.

During the war years much of the time of the staff had to be devoted to the problems arising directly and indirectly from the evacuation of the Bristol children. The original premises in Argyle Road suffered through bomb damage and the clinic was for a period in Cotham Side, but later moved to the larger premises in Brunswick Square, which had the advantage to parents of being in a better known area of the town and well served by buses from all parts of the City.

The general organisation of the Clinic arrangements is much as set out and advised in the Underwood Report, the psychologists working in the schools for half of their time.

Since 1936 a total of 8,267 new cases have been seen, an average of 352 a year. A further 1,179 have been referred, but for one reason or another the appointments could not be kept.

During this quarter century the Child Guidance movement in this country has not stood still and certain trends have become increasingly obvious.

First a tendency to exchange the old tripartite routine examinations for a more loosely and more medically orientated set-up, bringing in psychologists, paediatricians, electroencephalographers, etc., as the individual case requires. The tendency is symbolised by the increasing preference for the name "child psychiatry" rather than child guidance.

Second, a realisation that many stress situations between a child and his mother are really only one aspect of an interlocking family-personality-problem and that the lessening of stress between two members of the family may increase the strain elsewhere.

Third, an increasing awareness that many of the more serious problems have their roots in the pre-school phase of life.

Fourth, while some clinics have stressed increasingly individual psychotherapy, usually on an analytical basis, others have worked more towards bringing the general practitioner and Health Service into the picture and in treatment have used a variety of "supportive" techniques.

The Bristol Clinic has tended to run on the older pattern of Child Guidance. It has had the advantages of a very good inter-departmental liaison, in particular with Education, Health, the Children's Department, the Juvenile Court and the Probation Department. It has also had the advantages of a centrally directed service in which the psychologists, as well as the psychiatrists and psychiatric social workers, work from the same building.

While the advantages of a central clinic were obvious, as the City expanded the disadvantages to the parents became more and more apparent. Weekly bus fares could cause financial strain; the time involved for the journey was a problem to many mothers, particularly those with very young children, and so the demand for a service in the perimeter clinics steadily increased. Also there

was the need for more intensive work with the under fives and their mothers, particularly in the Maternity and Child Welfare Clinics, where more and more interest was being taken in the "mental health" of very young children.

In 1957 the first joint appointment was made of a psychiatric social worker following a pilot experiment by Mrs. Janet Bodman. Later, Dr. Lumsden Walker, while on the staff of the Child Guidance Clinic, also worked in the Maternity and Child Welfare Service. The administrative problems that such a parallel system would create had been foreseen, and, during 1959, steps were taken to combine the two services, so that the mere fact that a child went to school would not mean that a fresh team of specialists took over. The "planners" were faced with the usual difficulties of lack of staff and lack of suitable accommodation. There was also the question as to whether the service should spread by "budding" or whether an attempt should be made to cover the whole City, even although in places the service, to begin with, could not be much more than a token service. The latter course was decided on.

As from October 1st, 1959, the Child and Family Guidance Service came into being, the majority of its central administration being still carried on from the Brunswick Square Clinic. The members of the staff divide their time between the Brunswick Square Clinic and six perimeter clinics, Lawrence Weston, Southmead, Charlotte Keel, Mary Hennessy, Knowle and the William Budd Health Centre.

The joint staff of the Child and Family Guidance Service will by 1960 be 6 psychologists, 3 part-time consultant psychiatrists, a part-time registrar, an establishment, unfortunately in part unfilled, of 7½ psychiatric social workers and 5 clerks.

It is planned to divide the City eventually into zones, each zone having its own small team working for the most part at a perimeter clinic. The Brunswick Square Clinic, in addition to serving the central area, also provides the diagnostic service for the Juvenile Court, the Children's Department, the Education Department and the Health Department. For the time being it is also the clerical and records centre, and most of the teaching and demonstrations are carried out there, though the case conferences at the perimeter clinics will, it is hoped, gradually take over some of the teaching functions.

These changes have not been achieved without considerable strain on the staff concerned. Where previously they had the advantages of usually sitting at their own desk with their own records around them, they now have to be mobile and too frequently without the clerical service and other facilities that have been available in the past. Their work is now being carried out less comfortably, though one hopes no less efficiently.

On the other hand, the advantages to the parents and children are obvious. It will probably take two or three years before the new pattern emerges, and it will obviously be less stereotyped as each psychiatrist will have the day to day direction of the team in his own area. It is possible that the foundations are being laid for a really satisfactory city-wide Mental Health Service.

Annual Statistics

<i>Psychiatric</i>						<i>1959</i>
Diagnostic interviews	..	..	..	..	..	352
Physical examinations	..	..	..	..	..	339
Treatment interviews	..	..	..	..	..	1,354
Parent interviews	..	..	..	..	..	96
Others interviewed	..	..	..	..	..	8

<i>Psychological</i>						1959
Examinations, including Juvenile Court Cases	..	..	..	..	..	603
Treatment interviews	..	..	..	..	..	934
Parent interviews	..	..	..	..	..	117
Others interviewed	..	..	..	..	..	29
Other visits	..	..	..	..	..	119
<i>Social</i>						
Interviews with parents	..	..	..	..	..	2,141
Interviews with others	..	..	..	..	..	10
Home visits	..	..	..	..	..	294
Other visits	..	..	..	..	..	1

Changes of Staff during the year

Miss Berry Harrison, psychiatric social worker, left on December 31st, 1959.

Dr. M. Mair, whole-time school medical officer, seconded for part-time work at the Child Guidance Clinic, has been absent on study leave since the end of September, 1959, and her place was filled by Dr. W. M. Sutcliffe.

The consultant sessions total 17 per week; the Registrar 6 sessions.

The psychologists work in the schools approximately half time, the remaining 50 per cent being divided between the Brunswick Square Clinic and the perimeter clinic of the zone in which they work. The allocation of time for each psychiatric social worker between the Brunswick Square Clinic and the perimeter clinics varies, though with the exception of Mrs. Scrine, who works part-time, they are all whole-time in the Health Service.

CHILDREN'S CHEST CLINIC

D. J. Sheerboom

The number of new cases referred to the Clinic declined during 1959 from 39 to 20. This is unfortunate since there is no doubt that there are many cases of asthma in school and pre-school children who are receiving very little treatment. Quite apart from any possible help that may be given to the child, the mother also gains some benefit from attending the Clinic in that she is able to discuss all her problems related to the child.

In general, the clinic has continued exactly as before, seeing all types of "chesty" children. Once again, great use was made of the Physiotherapy Department, where postural drainage, breathing exercises and sunlight treatment are given. The latter is often found extremely useful in children whose "chestiness" is purely due to repeated minor upper respiratory infections, which are, in turn, due to poor nutrition or general debility. Five cases were referred to the Child Guidance Clinic, which they are still attending. All of these were difficult cases of long duration, with many family and personal problems. As one consultant psychiatrist stated—"this will be a hard nut to crack." Two cases were referred to the E.N.T. consultant, both of whom had tonsils and adenoids operation, with very satisfactory results. Two cases only were sent to the Residential Open Air School at Minehead, and are still there. One or two others would have been sent if parental consent had been given.

By and large, it has been a useful year with general progress in most cases. One satisfactory clinical point is that no child is at present attending the clinic with a completely fixed chest with its probable poor general prognosis.

The statistics relating to the work in the Clinic during 1959 are given below. The ages stated are for the new cases only, which show that nearly half the children are being referred before starting school, which is very satisfactory.

Total attendances	240
Total number of new cases	20
Total number of patients	79
Sex Ratio: Male: Female	58:21 = 2.8:1
Age at time of 1st attendance:	
5—10	11
Under 5	9
Discharges	29
Ear, nose and throat consultant	2
Child Guidance Clinic	5
Residential O.A.S.	2

CHIROPODY CLINIC

L. I. W. Tasker

There was a small reduction in the number of children attending the clinic for foot treatment compared with 1958.

The largest single category of defect was, as usual, *Verrucae plantaris* and the number of these cases during the year was 436 new cases (1,856 treatments) as compared with 514 (1,867 treatments) in 1958.

The numbers attending for other defects remained very much the same as other years and some 25 children were referred to the Orthopaedic Department for further advice or physiotherapy.

Attendances

	Primary and Secondary Schools		Maternal and Child Health	
	1st	Other	1st	Other
Metatarsalgia ..	6	10	—	—
Hammer toes ..	26	48	1	1
Verrucae plantaris ..	436	1,856	—	—
Hallux valgus ..	12	30	—	—
Foot strain ..	6	7	—	—
Miscellaneous ..	143	247	3	5
TOTAL	629	2,198	4	6

Athlete's Foot Survey

Mary D. Gibson

Mary P. English

In the Spring of 1959 the Medical Research Council held the annual meeting of its Medical Mycology Section in Bristol. This proved to be a very friendly and stimulating meeting and gave many opportunities for discussions which have proved extremely helpful in assessing the findings of our own surveys. The greater part of our work during 1959 has been arranging and writing up the findings of the previous two years' investigations.

The results of the first year's work were published in two papers in the *British Medical Journal* of June 6th, 1959. The first paper described how we had examined for *tinea pedis* some 1,839 boys and 2,061 girls, aged 11—14, from twelve secondary modern schools and 894 boys, aged 7—10, in four junior schools all situated in three different districts of Bristol.

Of the senior boys 40.3 per cent had lesions and 6.6 per cent had *tinea pedis*; 30.4 per cent of senior girls had lesions and 1.6 per cent *tinea pedis*; 33.2 per cent of junior boys had lesions and 2.2 per cent *tinea pedis*.

In the girls the incidence was too low to allow correlation of results with relevant environmental factors.

No correlation was found in this survey between infection rate and cleanliness, the presence of non-mycotic lesions, social class or the use of school showers.

There was marked correlation between infection and the district in which the school was situated. In one district the combined infection rate in senior and junior boys' schools was double that of similar schools in the other two districts put together.

Trichophyton Mentagrophytes was responsible for 84.4 per cent of all Bristol school infections, *T. Rubrum* accounted for 7.2 per cent and *Epidermophyton Floccosum* for only 3.9 per cent.

The second paper gave details of an investigation of the three swimming baths which serve the three districts where the schools were situated.

T. Mentagrophytes, the fungus responsible for the majority of the school infections, was the only fungus that we found on taking samples from the swimming bath floors but we isolated this repeatedly.

The fungus was found more often in the baths and the parts of baths used by populations with a high incidence of *tinea pedis* than in those used by populations with a lower incidence.

Brushing down the floors and frequent sluicing appear to be reasonably effective methods of removing infected particles of skin.

A further interesting finding that also pointed to the local swimming bath as an important factor in the transmission of fungus infection was that eight out of fourteen members of the swimming bath staff whose duties entailed their entering the water were found to be suffering from *tinea pedis* while none of the eleven staff who never swam were infected.

We concluded that swimming baths were an important source of *tinea pedis* infection.

It is hoped that the detailed results of the second year's work on cross infection with *tinea pedis* in the family will be published shortly in the medical press.

A further paper, in the preparation of which Miss Duncan, the Medical Records Officer, joined us, on various other factors which possibly influence the epidemiology of *tinea pedis* has recently been completed.

DEATHS OF SCHOOL CHILDREN

A.L.S.

The number of deaths among Bristol children of school age during the year was 24, 13 boys, and 11 girls. This compares with 23 in 1958 and 27 in 1957.

One of the principal causes of deaths was again leukaemia which was responsible for 5 deaths, the same number as in 1958. Malignant growths were also responsible for the deaths of 5 children. Deaths from road accidents were 3 this year as compared with 2 in 1958, but other accidents were responsible for only one death as against 3 in the previous year. Deaths from road accidents, in spite of the heavy increase in motor traffic, have remained at a low level as a comparison with figures of recent years will show:—

1958	..	..	..	2
1957	..	..	..	5
1956	..	..	..	2
1955	..	..	..	5
1954	..	..	..	3
1953	..	..	..	6

This reflects great credit on the much good work that is being done by teachers and others to instil road safety precautions among school children.

DENTAL CLINICS

J. McCaig

The year 1959 was marked by considerable staffing difficulties. Two new full-time officers were appointed, but both resigned within the year, one after six months to go to another Authority at increased remuneration, the other taking up work in the dental practitioner service, again because of the increased remuneration. This dentist, however, continued to give four sessions per week on a sessional basis to the Authority's service. Three other full-time officers resigned, having taken posts in other Authorities, two to work nearer their homes, and one because of the increased salary offered. One part-time dental officer resigned because her husband was leaving the City. One newly qualified dental officer who commenced sessional work with a view to taking a full-time post later on, left after four weeks to become an assistant in the dental practitioner service as the salary was a higher one than we could offer.

One of the main reasons for failure to retain staff is this financial one, and in order to induce young dental surgeons to enter the school service and to retain their interest it will be necessary to increase salaries and prospects to compete with those offered in other services. Dental surgeons in private practice offer their newly qualified assistants a commencing salary greater than the school dental service minimum salary of £1,100 per annum. A recent television programme showed that dental students expect to earn £1,500 in their first year after qualifying. There is little hope of attracting staff to the school dental service by offering them a commencing salary of £1,100, especially as on the present Whitley Council's scales it takes five years to reach £1,500 per annum, and three more years to reach the maximum of £1,735. Local Authorities have discretion in fixing the commencing point within the scales, but this is not exercised in all cases. Other inducements to recruitment that might be considered are—unrestricted practice in the National Health Dental Scheme outside official hours, or a five day week without compensatory duty; at present dental officers on the staff have to work an evening session in order to have a Saturday morning off. A dentist working evening sessions would then qualify for extra payment, and those not wishing to do private practice would have more incentive to do evening sessions in the school dental service. While remuneration is one of the main considerations in recruitment, opportunities for more responsible posts in the School Health Service with commensurate salary would probably be as attractive.

Good working conditions, modern equipment, and instruments, are essential. In September, 1959, approval was given in principle by the Committee to a scheme of modernisation of the dental clinics and replacement of old equipment at a cost of £6,000 to be spread over a period of five years.

In order to make up to some extent the shortage of full-time dental officers, part-time officers were engaged wherever possible, and at the end of the year the staffing position was equivalent to 9.5 full-time officers, made up in the following way:—

8 full-time dental officers (including the P.S.D.O.)

7 part-time dental surgeons—giving sessions equivalent to 1.5 full-time officers.

The total number of sessions given by part-time dental surgeons to the service during the year, including both the School Health and Maternity and Child Health Service, was 915.

In spite of the staffing difficulties, most of the dental clinics were kept functioning either on a full-time or sessional basis, and only one clinic, Brooklea, had to be closed entirely from March.

Many parents take little heed of any general advice offered even though they may be fully aware that the incidence of dental caries is on the increase. Dental decay is not a "killer" disease so that any warning given is soon forgotten, and too often the only reminder is pain which drives the child to visit the dentist. Hence regular school dental inspections are important as they give the dentist the opportunity of advising many children and their parents where dental advice would not have been sought voluntarily. Children found to require treatment are given forms of consent to take home to their parents, asking them to agree to have treatment for their children either at the school dental clinic or through the dental practitioner service.

The number of school children inspected during the year was 47,204, and the number treated 18,140. In the over 11 age group, inspection shows that more and more children are being treated by the dental practitioner service, which is a great help in our present staffing difficulties. Children attending the Authority's nursery schools are also included in the scheme of dental inspection and treatment, and children attending the Authority's residential schools are inspected on their return home for holidays and arrangements made for treatment before they return to the school.

As explained in previous reports, a Dental Surgeon from the Department of Children's Dentistry at the Bristol Dental Hospital carries out dental inspection at certain of the Authority's schools, and the children found to require treatment are offered appointments at the Dental Hospital. The figures below show the work carried out under this scheme during the year.

Number of children inspected	..	..	..	..	1,077
Number of children found to require treatment	..	..	..	..	780
Number of children treated	..	..	..	..	199
Total attendances	..	..	..	..	1,311

Maternity and Child Health Service

In addition to school children, expectant and nursing mothers and pre-school children are given the opportunity of having dental inspection and treatment. These form the priority cases and are the statutory responsibility of the Local Health Authority. The school dental service carries out this responsibility and in all clinics facilities are available for the inspection and treatment of these patients.

Oral Hygienist

The work of the Oral Hygienist continues to be one of the most important aspects of the school dental service. Children find enjoyment in the instructive films shown, developing more interest in the care of their teeth. Instruction is given in tooth brushing and mouth rinsing to promote clean healthy mouths and a higher standard of oral hygiene amongst school children. In addition to this instruction and education, scaling and polishing of teeth and gum treatment are given as routine treatment. This enables the Oral Hygienist to introduce young patients to the use of dental instruments so that they become familiar with dental equipment, and this tends to remove the fear which children usually associate with dental treatment.

The Oral Hygienist also gives talks to various groups of students and knowledge gained from this service is appreciated by students who will have the welfare of children in their future careers, *e.g.* Matron Housekeepers, Domestic Science teachers and Physical Training teachers. In spite of all efforts, education propaganda and treatment, the incidence of dental caries amongst children is on the increase.

School tuck shops have come in for a great deal of criticism recently and the cry goes up "Abolish them!" It is not possible to stop children eating sweets and few would dare to court such unpopularity. Any propaganda we can bring to bear against the sweet eating habit is infinitesimal, compared with the present day advertising used to entice people to buy sweets. If the school tuck shops are abolished the children will only go elsewhere, whereas if they are continued they may be put to better use by being encouraged to sell products less harmful to the teeth.

More research into dental decay is required as there is no one simple cause of dental caries, just as there is no one single cure. In the meantime while awaiting the results of research, more might be done to spread the true facts of fluoridation. Experiments in adding fluorine to water supplies, in order to reduce dental caries, are taking place in various parts of the country. The results should be available soon, and the question of general fluoridation of water supplies will become an important issue. More information about these experiments and their possible effect in reducing dental decay could help to create a more favourable reception to the idea of fluoridation when the time comes.

The figures relating to the work of the Oral Hygienist during the year are as follows:—

Number of children seen	..	..	..	1,154
Number of attendances for treatment	..	..	..	1,672
Number of mothers seen	..	..	..	136
Number of attendances for treatment	..	..	..	233

Orthodontic Clinic

The arrangement continues whereby the Consultant Orthodontist from the Dental Hospital attends the Central Health Clinic for one session per week to inspect children referred by the school dental service. Those found to require treatment by appliances are referred to the Dental Hospital. Children requiring treatment by extraction are referred to the respective school dental clinics.

Number of new patients	..	..	..	514
Number of attendances for consultation	..	..	..	764
Number of attendances for impressions	..	..	..	265
Number referred to the Dental Hospital	..	..	..	383
Number of treatments completed	..	..	..	31

Dental Technician

Output of the laboratory is shown below:—

Number of dentures completed for mothers	..	..	174
Number of dentures completed for school children	..	..	107
Number of repairs to dentures for mothers	..	..	7
Number of repairs to dentures for children	..	..	18
Number of inlays	..	..	13

EAR, NOSE AND THROAT SERVICE

H. D. Fairman

The ear, nose and throat service for school children includes consultative clinics, treatment centres, X-ray and physiotherapy services, speech therapy, the Hearing Assessment Clinic. It also includes facilities provided for the deaf at Elmfield School for the deaf, the partially deaf unit for primary school children attached to Eastville Junior School and by the peripatetic teacher of the deaf who visits those less severely deaf children who have been placed in normal schools, some of them wearing Hearing Aids and some without.

Statistics relating to this service are given below:—

Consultative Clinics

Number of new patients	1,039
Number of attendances	1,557
Number of new cases of aural suppuration	190
Number of cases of aural suppuration outstanding at the end of the year	11

Two consultative sessions weekly are held in turn at two of the following clinics—The Central Clinic, Speedwell Clinic, Bedminster Clinic, Portway Clinic and Southmead Clinic. Nevertheless there is need for further consultative facilities and it is hoped to establish another consultative session in the Hartcliffe-Withywood area. At the present time children from these areas are seen at the Bedminster Clinic which involves them in a long journey.

Arrangements are being made to establish a unit for partially deaf children of the Nursery and Infant age groups at Ashton Vale Infants' School. This unit will provide for ten children and will fill the need for educational facilities for partially deaf infants which was mentioned in the report for 1958. It is envisaged that children from this unit will eventually either graduate to a normal class in a normal school under the supervision of the peripatetic teacher of the deaf or else will pass to the partially deaf unit attached to Eastville Primary School. The need for facilities for secondary school education for the partially deaf is now becoming apparent as some of the older children at Eastville are coming to secondary school age but are too severely handicapped to be able to hold their own at a normal school.

EMPLOYMENT OF CHILDREN

L. A. Tavener

During the year ended 31st December, 1959, appointments for medical examinations were made for 675 children. Of these, three failed to attend and one boy refused to remove his clothing. The remaining 671 children were registered after being found fit for part-time employment. The average number of children employed at any given time fell from 479 in 1958 to 432 in 1959. The total on the register was 95 less than in 1958.

Thirteen children were examined and found fit to take part in public entertainments under licences issued by the Authority. No adverse reports were received and the conditions and restrictions were duly observed.

The following table indicates the type of employment in which the children registered were engaged.

	<i>Boys</i>	<i>Girls</i>
Newsagents	563	50
Multiple stores	—	15
Butchers	3	—
Grocers	13	5
Others	7	15
	<hr/> 586	<hr/> 85

During the year there has been a slight increase in the number of children engaged in part-time clerical work. Four girls and one boy were registered in this capacity.

No child was found to be unfit to undertake part-time employment and those children who were re-examined after changing their employment were not found to be unfit for further employment.

ENURESIS CLINIC

J. E. Kaye

The treatment of nocturnal enuresis during 1959 has followed the pattern of previous years. There were only two sessions a week from January, when Dr. Moran relinquished this work, until September when Dr. Sutcliffe took over his clinic.

During the year 207 children attended the clinic. Out of this number 16 were discharged as cured after at least six months observation. A further 38 children failed to attend regularly and were dropped. The great majority of these children attended only a few appointments and this was a group where there was very little parental co-operation. One child moved from Bristol before completion of treatment.

Twelve children were referred to the Children's Hospital for full urological investigation and in 8 cases the report was negative; one child was admitted for treatment of cystitis of the bladder neck; one was under observation because of trabeculation, suggestive of some degree of obstruction, and two children had slight trabeculation which had no bearing on enuresis. As in previous years we were very fortunate to have help and advice from the Child Guidance Clinic. Fifteen children presented serious psychological problems and were referred to the Child Guidance Clinic, fourteen of them were taken on for treatment at the Clinic, and one failed to attend appointments.

At the end of the year there were 152 children remaining under treatment, 72 of them had commenced treatment in 1959, 51 in 1958, 16 in 1957, 6 in 1956, 4 in 1955, 2 in 1954 and one girl since 1951. She had long dry spells, sometimes for several months but unfortunately her family life was unsettled and after every major upset at home she relapsed.

It was possible to try a nocturnal enuresis alarm on four children. This is an apparatus which is operated by a 6 volt dry battery, is perfectly safe and wakes the patient at the beginning of micturition. In two cases the response was dramatic. The case histories are as follows:—

Case One: A boy aged 10, an only child, came to the Clinic in 1955 because of nocturnal enuresis. The parents and the boy were of good intelligence and the family background was settled. There was no history of enuresis in the family. He was a healthy boy, friendly, co-operative and very anxious to become dry, but he had not responded to treatment at all. He became over-anxious about his enuresis, was depressed and afraid that he would remain a bedwetter all his life.

He was given the nocturnal enuresis alarm at the end of April. By the beginning of June he was almost dry and by August he was dry all the time. He returned the alarm in September, as he did not require it any longer. He was a happy and self-confident boy. He remained dry.

Case Two: A boy aged 12 commenced treatment in 1954. He had a good settled family background, but there was a very bad family history of enuresis, father still being an enuretic and mother was an enuretic until adult.

He was a quiet, inhibited boy, lacking self-confidence. He showed no response to the treatment, and was wet almost every night. Full urological investigation at the Children's Hospital was negative.

He was given the alarm in April, and by the beginning of June he was dry but had four wet nights in July when ill in bed and three wet nights in September after excessive intake of fluids during hot weather. He has remained dry since, but is still under observation.

The following two cases responded differently to this mechanical treatment:

Case Three: A boy aged 16 commenced treatment in 1957. He was of good intelligence and attended a technical school. There was no family history of

enuresis. He was a very quiet depressed boy, physically small but quite healthy. He did not get on well with his younger brother and sister and the relationship with his father was poor. He had full urological examination at the Children's Hospital and minor abnormalities which were found had no influence on enuresis. He showed no improvement and responded very little to treatment.

He was given the alarm in September. The alarm woke him nearly every night, but there was no improvement in his enuresis.

Case Four: This 14½ year old boy was an illegitimate child. He started treatment in 1957, but soon failed to attend and was discharged. He came to the clinic again in May 1959. He was wet almost every night. He had full urological investigation at the Children's Hospital and the report was negative.

He commenced treatment with the alarm in September. At first the boy co-operated very well and was progressing very satisfactorily and was almost dry in November. Unfortunately for no apparent reason the boy became unco-operative, failed to keep several appointments and did not make any effort to bring the alarm for the change of batteries. When last seen on 30th of December he was as wet as at the beginning of treatment.

These four cases are our only experience of the nocturnal enuresis alarm and it is quite impossible to assess the value of this treatment as yet. However we hope to have more comprehensive results during the coming year.

EYE CLINICS

P. Jardine

During 1959, 5,181 examinations for refractive errors were carried out, the number of children concerned being 4,438. The number of new patients seen during the year was 1,047 and the total attendances made by children at the ophthalmic clinics were 6,285. Glasses were found not to be necessary in 1,130 cases and of the 2,235 pairs of spectacles prescribed, the great majority had been obtained by the end of the year through the ophthalmic services arrangements of the National Health Service. The surgical treatment of squint is carried out at the Bristol Eye Hospital and 119 operations for this condition took place during 1959 in respect of Bristol school children. Each case undergoes preliminary investigation at the ophthalmic department of the Eye Hospital or at the Central Health Clinic and a period of ophthalmic treatment may precede or follow the operation.

Miss M. J. Smith has continued in charge of the orthoptic department at the Central Health Clinic, and, in addition, spends part of her time at the Bristol Eye Hospital where an orthoptic service is also provided for children including considerable numbers of Bristol school children. The figures relating to the orthoptic work at the Central Health Clinic during the year are as follows:—

Number of sessions	..	..	..	..	..	354
Number of new cases seen	..	..	..	..	..	344
Other attendances	..	..	..	..	..	1,751
Total attendances	..	..	..	..	..	2,095

HANDICAPPED CHILDREN AND SPECIAL SCHOOLS

Blind Children

A.L.S.

There has been a slight fall in the numbers of blind children maintained by the Authority at the Royal School of Industry for the Blind, Westbury-on-Trym there being 16 children (10 boys and 6 girls) there at the end of the year, as compared with 18 children (11 boys and 7 girls) at the end of 1958. There were rather more day pupils at the school, 4 as against 2 in 1958. In addition to these children there was one girl at the Royal Normal College for the Blind, and one boy at the Worcester College for the Blind, making a total of 18 blind children for whom special provision was being made.

In addition there were 4 Bristol young people receiving training at the Royal School of Industry for the Blind under further education arrangements. Two young women were attending as day trainees, and 2 young men as boarders.

Partially Sighted Children

The second class for partially sighted children at South Bristol Open Air School has now been in operation for a full year, and the advantages of this additional class have been much appreciated. There were 19 children on the registers at the end of the year (14 boys and 5 girls) as compared with 17 (13 boys and 4 girls) in 1958. It will be noted that there was a preponderance of boys among the partially sighted children attending this Unit, and indeed this preponderance persists among all classes of handicapped children at South Bristol Open Air School.

In addition to the children attending the Partially Sighted Unit at South Bristol Open Air School there were 5 children attending residential schools as follows:—

	Boys	Girls	Total
West of England School for Partially Sighted Children, Exeter	2	2	4
Exhall Grange School, Coventry	1	—	1

Deaf Children

Elmfield School for Deaf Children R. E. Olding

In accordance with modern trends in the education of profoundly deaf children, especially the emphasis on stimulating residual hearing, a substantial re-equipment programme was undertaken at Elmfield School, and was completed during the year. Each classroom was equipped with the loop-induction system of sound reproduction and an appropriate mains amplifier, to be used with individual transistor induction-coil hearing aids with which each pupil was issued. Loop lines were also fitted to the Dining/Assembly Hall, Art and Craft Room and Needlecraft Room. Three new versatile group hearing aids were installed, making four in all, whilst all the classrooms were acoustically treated. The School now possesses its own pure-tone diagnostic Audiometer.

A girl and a boy, both Grade III deaf children were, after examination, awarded places respectively at Mary Hare Grammar School and Burwood Park Technical School. A boy was transferred to the West of England College of Art, one girl to the Partially Deaf Unit at Eastville, and another to an Infants' School.

Our senior children continue to derive valuable educational and social experience from their regular contact with local schools, where they are taught woodwork, art, domestic and commercial subjects. Exchange visits were made with neighbouring primary and infant schools. We are grateful for the co-operation and interest of the Heads and teachers concerned.

A close liaison with the staff of the hearing assessment clinic, the hearing aid department of the Bristol General Hospital, the partially deaf unit at Eastville School and the peripatetic teacher of the deaf was maintained.

At the end of the year there were 55 deaf children (27 girls, 28 boys) in attendance at Elmfield, including 8 children from other Authorities.

In addition to the children at Elmfield the following deaf children were being maintained at various residential schools at the end of the year:—

	Boys	Girls	Total
Mary Hare Grammar School, Newbury	2	2	4
St. John's Residential School for the Deaf, Boston Spa, Yorks.	2	—	2
Burwood Park School for the Deaf, Surrey	2	—	2
Royal West of England School for the Deaf, Exeter ..	1	1	2
Yorkshire Residential School for the Deaf, Doncaster ..	—	1	1

In addition one deaf/E.S.N. boy was being maintained at Bridge House School, Harewood, Yorkshire at the end of the year.

Unit for Partially-Deaf Children Eastville J.M. School

R. Smith
R. G. Lewis

Ten children of the seven to eleven age group are at present on the roll of the Partially Deaf Unit at Eastville Junior Mixed School. The four boys and six girls are, with one exception, drawn from Bristol Education Committee schools. All the pupils are partially deaf but their degree and type of deafness varies as does their speech, language and educational attainment.

The aim of the unit has continued to be the integration of the children as closely as possible into the hearing society of the school while the teacher of the deaf can give them the special help they require. To this end the new equipment provided at the beginning of the year is invaluable. The Westrex Individual Auditory Training Unit enables each child to have individual speech instruction at his best listening level, while the induction loop system worked from the same set makes use of the transistor Medresco aids which all the children have. It allows mobility of children and teacher at all times with good amplification and quality of reproduction of sound. The tape recorder and record player can both be used through the loop. As the Westrex Auditory Training Unit is battery powered it can be taken anywhere in the school. In addition the Phillips group hearing aid has been improved by the fitting of binaural controls for each child and ten sets of moving coil head-phones to replace the insert moulds.

As part of their integration in the school all the children from the unit join their own age group for P.E., games, handwork and needlework. Eight children join hearing classes for music, five for scripture and two for arithmetic and general work.

During the last year a boy and girl have been absorbed into normal secondary schools where they are visited by the peripatetic teacher of the deaf. Their places were taken by two seven year old children.

Close contact is kept with the parents through regular meetings at school when there is always a good attendance. Close liaison is maintained with Elmfield School for the Deaf, the peripatetic teacher for the deaf, the hearing assessment clinic, and the hearing aid technician at the Bristol General Hospital who services the Medresco aids regularly.

In addition to these children at Eastville School the following partially deaf children were being maintained by the Authority at residential schools at the end of the year.

	Boys	Girls	Total
Tewin Water Residential School for partially deaf children, Hertfordshire	1	—	1
Ovingdean Hall Residential School, Brighton	3	—	3

Partially Deaf Children Visited by the Peripatetic Teacher

R. H. Sturman

With the retirement of Miss Sharwood from Elmfield School for the Deaf in December 1958 the new year commenced by welcoming her successor, Mr. R. E. Olding as Headmaster. Though new to Bristol, he came with a knowledge and understanding of deaf children and a keenness to help in further progressive measures that would benefit children handicapped by any degree of deafness.

Though it was hoped that this year would see the establishment of a class for the partially deaf children of infant school age in a normal infants' school, the project had to be postponed for a time.

During the year the peripatetic teacher made 753 visits to children dispersed in 26 schools in the City. Eight new children were added to the list. Of these, two were girls in secondary schools; one girl in the Open Air School; one boy in a secondary school; two boys in primary schools; one boy in an infants' school and one boy in a nursery school.

Before the year closed all the children had been fitted with a transistor hearing aid and, throughout the year, with the exception of one boy who would be better catered for in a special (E.S.N.) School, they worked well both in their individual lessons and class work and made satisfactory progress. One seven-year old boy was able to be transferred to the junior unit at Eastville when a vacancy occurred there in September. One boy in a secondary school needed no further help and one girl reached school leaving age and left at Easter.

When the new school year began in September two boys moved from primary to secondary schools, and one boy moved from nursery school to infants' school.

At the end of the year the placement of children receiving help from the peripatetic teacher was as follows:—

<i>School</i>		<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Nursery		1	—	1
Infants		3	—	3
Primary		4	1	5
Secondary		8	5	13
Special Open Air ..		—	1	1
Special E.S.N. ..		—	1	1
Total		16	8	24

Provision for Partially Deaf Children of Nursery School Age

A.L.S.

The provision of special educational treatment for children of nursery school age who have a moderate degree of hearing loss was the subject of consideration towards the end of the year. It is generally accepted that special educational treatment for deaf and partially deaf children should commence at as early an age as possible. There are two nursery classes for children who are profoundly deaf at the Elmfield School for Deaf Children, but as yet no provision exists for partially deaf children of this age. It is therefore proposed to open a class for ten of these children at Ashton Vale School, which has recently been built on the outskirts of the City and to equip a classroom with an amplivox auditory training unit and to provide a loop induction system both in the classroom and in the school hall. Transport would be arranged for these children to and from the school and their homes in the same way as it is for other handicapped children attending special schools. The Committee have given their approval to this project and it is hoped that the necessary equipment will be provided and the class opened by the Autumn term 1960.

Educationally Sub-Normal Children

Russell Town Day Special School for Senior Boys

J. N. Tolley

This year has seen the extension of school activities to include a limited amount of gardening and poultry keeping, a very small plot of land becoming available to us in July. Progress in dealing with some reading difficulties has been maintained, and attainment levels show continued improvement.

Certain activities, notably metalwork, are still seriously handicapped by the inadequacy of the premises. Home/school liaison has proved valuable to us, though the need for more of this work is becoming apparent. We are encouraged by the ready co-operation of nearly all parents, and their gratitude for what we in school are trying to do.

Boys have continued to do well in swimming, 23 gaining 4 lengths certificates, 6 half mile certificates, 4 Intermediate Life Saving Certificates, and 2 Bronze Medallions. A new departure in football has been the formation of a "Combined XI" consisting of boys from Russell Town, the School for the Deaf, and perhaps some from South Bristol Open Air School.

Our school leavers have been faced with a deteriorating employment position, which has called for exceptional measures and effort on the part of the Youth Employment Office and school. Despite all this a few of our less-able leavers have needed the help of the Occupation Centre at Marlborough House and the Council for Disabled Adults, when competitive employment has proved beyond them. This problem is likely to increase over the next few years and should be seriously engaging the attention of those of us who see the need for "sheltered" employment.

At the end of the year there were 125 boys on roll (3 from other Authorities); 27 boys were admitted and 2 re-admitted during the year. Thirty-one boys left for employment, 3 were transferred to the residential Special School, and 7 were excluded.

House-in-the-Garden Day Special School for E.S.N. Senior Girls

I. M. Bond

The aim of this school continues to be to help to equip girls to take their place in society as good women in homes and able to earn a living for themselves within their capacity. All the work undertaken follows this theme, and developments have taken place in order to bridge the gap between school and work. Visits have been arranged to firms that are likely to be able to offer suitable employment. Visits were also made during the year to places of interest in the City. A link has been established between the School and the Lawrence Weston Branch of the Old Age Pensioners' Association. Gifts from the harvest festival were sent to the members and at Christmas the school pupils entertained a party of about 50 members of the Association. Enthusiasm for the swimming lessons has grown.

"Open" days have been organised to give parents an insight into what the school can offer.

Lastly, the school is benefiting from regular help given by an able team of experts—medical and dental officers; psychologist; welfare officer; nurse; speech therapist; teacher of deaf and youth employment officer.

The number of girls on the registers of the school at the end of the year was 102, including three from Somerset.

Henbury Manor Day Special School for Junior E.S.N. Children

In the Report for 1958 mention was made of the proposal to improve the facilities at the school and in the following note Miss Davis-Morgan, the Head of the School speaks of the great improvement that these additions have made to the amenities of the school.

Jean Davis-Morgan

The highlight of 1959 at Henbury Manor was the building project which took from February to November and resulted in our having a new assembly hall and adjoining servery and the re-organisation of the interior lay-out. We now have toilet and cloakroom accommodation adequate for the children's needs and in suitable places, and a new bathroom which enables us to deal more easily with children who soil.

The old-fashioned cloakrooms and kitchen have been altered and are now a new administrative block. In consequence life is easier for the staff and the children and less time is wasted.

As a result of an excess number of boys, we now have two all boy classes. Numbers on registers at the end of the year were as follows:—

Girls 34 (including one from another authority)

Boys 66

B. J. Boulton

This School has provision for a hundred junior and infant educationally sub-normal children. It includes a separate Diagnostic or Observation Unit for younger children of doubtful educability. In the Autumn of 1958, it was agreed in order to provide a closer association between Henbury Manor and the School Health Service Department that arrangements should be made for one of the Education Committee's Medical Officers to visit the school every week. He would examine all new pupils soon after their admission and eventually he would make recommendations to the Education Authority for the exclusion of children considered to be ineducable. It was believed that the facilities for close and regular observation of such children and frequent discussion with the Head and the staff of the school would help the Examining Medical Officer to reach a more accurate assessment of the capabilities of the children than was previously possible from one or two clinic examinations of a child known or unknown to him. He would also be responsible for routine medical examinations at the school, paying special attention to defects of vision, hearing, speech and other disabilities causing additional handicaps to the educationally retarded child.

During 1959 I have visited Henbury Manor at least once a week during term time and I have had ample opportunity for observation and examination of the children, and for discussion with their teachers, and with the visiting Senior Educational Psychologist, Mr. R. V. Saunders.

Educationally Sub-normal Children of Junior School Age

Most educationally sub-normal children of junior school age are catered for in Bristol by placement in special classes in ordinary schools and as room becomes available in the primary schools it is expected that more of these will be set up in the near future, usually on an area basis. Some children however, for various reasons are not suitable for the special class or there is none in the neighbourhood of their ordinary school and for them the special school provides a need. Nearly 75 per cent of the pupils come into this group; the majority of them are found to be from $2\frac{1}{2}$ to 4 years retarded educationally and have found great difficulty in understanding a good deal of what went on in class in the ordinary school. The main purpose of the Special School, apart from social training, is to obtain the best from the child within his capacity by making the approach to lessons easy and interesting so that he understands what is going on in his classroom and has his confidence restored by his ability to earn

some praise from the teachers who are specially trained to understand his problems. Nevertheless, progress in reading and arithmetic will continue to be slow and a number of children (about 50 per cent) will not begin to make much progress in reading until they near the end of their time in Junior school.

At the end of each term a number of pupils pass on to Senior Special Schools, Day or Residential. A very few may return to ordinary schools. There is therefore a regular and fairly constant flow of junior children into and out of the school.

Educationally Sub-normal Children of Infant School Age

For administrative purposes children coming into this category fall roughly into three groups:—

1. Children who from the first are obviously ineducable and the parents accept the fact. These are reported to the Mental Health Authority for occupation centre training without attending any special class in school.
2. Children of doubtful educability. Some are classified so because of difficulties of assessment due to multiple handicaps or behaviour problems. In some cases it is necessary to try the child in the school situation in order to persuade the parent of the true qualities of the child, or to reinforce one's own opinion. There are places for 27 such children.
3. Few educationally sub-normal children of infant age are admitted to the special school since most are catered for by the ordinary school. In some cases, however, since no categories are clear cut but shade into each other, early placement is desirable at the special school.

The Medical Officer, Educational Psychologist, Headmistress and class Teacher work as a team. Sooner or later they have the following questions to answer in connection with each child admitted to the school and especially to the diagnostic unit.

1. Is the child suitable for education? Will the child prove to be educable?
2. Has the child any additional important disability not previously noted, e.g. major defects of hearing or vision?
3. How does the child behave in the school and in the company of other children?

The majority of the infant children coming into the school at ages of five to six and a half with I.Q.'s between 48 and 60 will have mental ages ranging from $2\frac{3}{4}$ to 4 years. In attempting to assess the future educational prospects of these very young children, it must be remembered that mental tests do not give a highly reliable prediction of subsequent intellectual development. It is quite certain that no attainments in reading or number can be expected for several years. It is therefore mainly a matter of observation and past experience, and we may have to wait until the child has reached the age of seven years or so before attempting to assess his educability with any degree of accuracy. Not infrequently a further period of observation after the child has reached the age of seven is recommended. Consequently, though not unmindful of the statutory duties of the Local Education Authority in connection with mentally handicapped children reaching the age of five, it is sometimes necessary to defer special educational treatment on the grounds of gross immaturity, and allow the children to stay at home for 6—12 months.

Reading Attainment in Special Schools for the Educationally Retarded

An investigation was carried out at Henbury Manor Junior Special School for the purpose of attempting to discover what improvement in reading ability may be expected when educationally retarded children of junior age are transferred to Special Schools.

The Burt revised Word Reading Scale was used for testing the two top classes in the Junior School.

1. Boys—Of the nineteen boys tested, twelve were non-readers. With one exception all were regarded as educable on the evidence of general intelligence tests and observation in class. Their ages range from nine years three months to ten years ten months. They had been pupils in the Special School for periods ranging from six to forty-two months; the average period was just over twenty-three months.

Seven boys had made some progress in reading, their average age was ten years four months and their average reading age five years three months.

2. Girls—Of the twenty-one girls tested ten were found to be non-readers. With one exception all were regarded as educable on the evidence of general intelligence tests and observation in class. Their ages range from eight years eleven months to eleven years. They had been pupils in the Special School for periods ranging from seven to fifty-one months; the average period was twenty-six months.

Eleven girls had made some progress in reading. Their average age was ten years four months and their average reading age five years six months.

				Non-readers	
				Boys 12	Girls 10
Average Age	..	..	..	10 years 1 month	9 years 8 months
Average time in Special School (months)	..	..	..	23	26
Average mental age	..	..	..	6 years 9 months	6 years 3 months
I.Q. range	..	..	..	55—78	58—79
				Readers	
				Boys 7	Girls 11
Average Age	..	..	..	10 years 4 months	10 years 4 months
Average time in Special School (months)	..	..	..	25	19
Average mental age	..	..	..	7 years 5 months	6 years 6 months
I.Q. range	..	..	..	66—79	60—74
Average reading age	..	..	..	5 years 3 months	5 years 6 months

On the face of it then, it appears that little or no progress in reading may be expected in the Junior Special School. When we turn however to our Senior Special School sixteen year old leavers, who have by other standards been regarded as educable, we find that their reading ages will probably range from nil to eleven years, and that the great majority of them will fall into the seven to nine and a half year range, the girls perhaps doing a little better than the boys.

Conclusions

1. The great majority of educationally retarded children who need special educational treatment in Special Schools make little progress in reading before the age of ten, and will probably attain a reading age of from seven to nine and a half years when they leave Senior Special School.
2. Reading ability or lack of it is, *in itself*, no reliable guide as to educability.
3. The survey confirms what we already know, namely that as far as reading is concerned the educationally sub-normal child is not only backward with reference to his true age but also with reference to his mental age, and will usually remain so during his school life.

Special Classes for E.S.N. Children in Ordinary Schools

A.L.S.

During the year two additional classes (in ordinary schools) for E.S.N. children were opened. Both of these were at Whitehouse School, and there are now nine such classes in primary schools, and six in secondary schools. The policy of providing special educational treatment for the less severely mentally retarded children in the ordinary school environment has undoubtedly been most successful, and is much more acceptable to the parents of the children than special school provision. Mention was made in the Report for 1958 of the Unit at Hillfields Park School, which has been developed as an in-service training unit for teachers who are to undertake the work of teaching backward children. This Unit has now been running for over a year and is proving a most useful innovation.

Residential Special Schools*Croydon Hall School for Senior Girls, Felon's Oak, Minehead* M. H. Davies

This school continues to cater for the needs of the educationally sub-normal senior girls who require residential placement, and at the end of the year there were 39 girls on the registers of the school (14 Bristol girls and 25 from other Authorities). An important aspect of life at such a residential school is the pupils' need for home life and continuing contact with the home wherever possible. In the following note Miss Davies, the Head of the school, gives a graphic impression of this aspect of the work carried on at the school.

"Dear Miss, Only three more days of holiday and then we shall be back at *home* thank goodness". "I have two *homes*" said another "and this one's the best!" and "Coming Home" we sing as we draw nearer any night.

It is very necessary that a residential school such as ours should be *home* as well as school. For surely never were children more in need of either. In all the thirteen years we have been here there never has been a term when more than five girls out of the forty at the school have had good homes and far too often there have been less.

"I'm having a lovely holiday, Miss", wrote one girl. "We've got TIVVY! It's not that I like it all that much but our Ma stays home now of nights and it's more like a family".

1959 had its heavy toll of tragic stories—more perhaps than ever. No letters, no pocket money, no little parcels except from strangers, for the great majority. When a rare letter came it generally contained news of the death of an uncle, a grandmother or a dearly loved pet, and a weeping child would sit disconsolate over her tearstained books and refuse to be comforted.

A poor little illiterate with a drunken and filthy home sat clutching a scrap of paper to her—a scrap she could not read. "It's a lovely, lovely letter from my mummy, Miss—*look* at the lovely kisses".

Therefore, apart from our school work it is, and must always be, our first endeavour to give to these children a home. There is little to choose between the needs, whether of the 5 Dorset, 3 Poole, 1 Gloucester, 1 Kent, 3 Bath, 6 Wilts, 4 Somerset, 1 Devon, 1 Cornwall, or the 14 Bristol children who were in our care in December, 1959.

To many of our old girls home is still *here* and we have had good news of over 80 of them this year.

Kingsdon Manor School for Senior Boys, Somerton

G. A. Morris

At the end of 1959 there were 60 boys on the registers. Of these 47 boys were from Bristol. Children from other authorities were as follows:—

Cornwall	..	..	4
Gloucester	..	..	1
Berkshire	..	..	1
Essex	..	..	1
Devon	..	..	2
Somerset	..	..	4
			<hr/>
			13

Two boys left the school during the year to attend a five term course at Wallingford Farm Training School, Benson, Oxford.

During the fine Summer, the school swimming bath was in use every day, and two swimming galas were held, competing with the Sandhill Park Special School, Somerset. Both galas resulted in a win for Kingsdon.

There were no epidemics of any kind during the year, and the health of the boys was particularly good. Dr. A. M. Fraser, assistant school medical officer, visited the school each term, and all the boys had a routine medical examination in the twelve months. Accidents were few and far between. The majority of pupils have had three polio injections and B.C.G. vaccinations have been carried out where the parents have agreed to them being given.

In addition to the children at the Authority's residential special schools, the following children were being maintained in independent schools for E.S.N. children.

	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Besford Court R.C. School, Worcestershire	5	—	5
Clyffe House School, Dorset	1	—	1
Beacon House School, Lichfield	1	—	1
Sandhill Park School, Somerset	1	—	1
Spring Hill School, Ripon	—	1	1
Meadows House School, Kent	1	—	1
All Souls School, Middlesex	—	1	1

Ineducable Children and E.S.N. School Leavers

A.L.S.

During the year 81 children were reported to the Local Health Authority for the purposes of the *Mental Deficiency Acts*: 34 under Section 57 (3) and 47 for statutory supervision after leaving school under Section 57 (5) of the *Education Act*, 1944. In addition 32 educationally sub-normal children who left school during the year were referred to the Special Schools After-Care Officer for supervision. Of these 12 had been attending special schools, and 20 had been receiving special educational treatment in ordinary schools. In addition, one school leaver in the care of the Children's Officer was referred for supervision by the Children's Department. No supervision was thought to be necessary in the cases of 30 children (15 from special schools and 15 from ordinary schools).

E.S.N. School Leavers 1959

	<i>From Special Schools</i>	<i>From Ordinary Schools</i>
Reported to the Local Health Authority under Section 57 (5) of the <i>Education Act</i>	34	13
Referred to After-Care Officer	12	20
Referred for supervision by Children's Officer	1	—
Referred for supervision by Probation Officer	—	—
No supervision necessary	15	15
		<hr/>
Total ..	62	48

Ineducable Children referred back to the Educational System

During the year there was one child in whose case a report to the Local Health Authority was cancelled under the provisions of Section 8 of the *Education (Miscellaneous Provisions) Act, 1948*. The circumstances in this case were somewhat unusual. The child had been reported to the Local Health Authority at a very early age because the parents had made a request to the Mental Health Service for institutional care for a time for the child as they were finding it increasingly difficult to look after him. Later, the Local Education Authority not being aware of this, the boy was admitted to one of our day special schools and had made reasonably good progress. When by chance the earlier reporting came to light it became necessary in order to regulate the position formally to cancel the report which had been made some years previously.

Maladjusted Children

A.L.S.

At the end of the year there were 33 children (21 boys and 12 girls) placed by the Authority at various residential schools or hostels for maladjusted children. This compares with 29 children (22 boys and 7 girls) at the end of 1958. In most cases the schools and hostels concerned have been those which have been used by the Authority for some time past. Endeavours are always made to place children wherever possible in the West of England area, but occasionally it is necessary to send a child some distance from Bristol in order to achieve a suitable placement. It will be noted that there is an increase in the number of maladjusted girls placed in schools or hostels (12 as compared with 7 in 1958). Six of these girls have been placed at St. Ann's Special School, London, which has been found to be a most satisfactory school for this type of child. Details of the schools and hostels attended by these maladjusted children at the end of the year are as follows:—

	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Sutcliffe School, Winsley, Wilts.	3	—	3
Muntham House School, Sussex	2	—	2
Edward Rudolf Memorial School, Dulwich	—	1	1
Redhill School, Kent	1	—	1
Chaigeley School, Thelwall, Lancs.	1	—	1
Swalcliffe Park School, Oxon.	1	—	1
St. Peter's School, Horbury, Yorks.	—	1	1
Breckenborough School, Yorks.	1	—	1
Bourne House Hostel, Lincs.	—	2	2
Pittsburgh House Hostel, Stoke-on-Trent	—	1	1
Whatcombe House School, Somerset	2	—	2
St. Ann's Special School, London	—	6	6
St. Andrew's School, Bridgwater	4	—	4
Cotswold Chine School, Glos.	1	—	1
Farney Close School, Sussex	1	—	1
Pitt House School, Torquay	1	—	1
Woodlands School, Sussex	1	—	1
Mounstephen House Hostel, Devon	1	—	1
St. Rose's Convent School, Stroud	—	1	1
Walton Elm School, Sturminster Newton, Dorset	1	—	1
	<hr/> 21	<hr/> 12	<hr/> 33

Delicate and Physically Handicapped Children

Periton Mead Residential Open Air School

P. Tomlinson

This residential school for delicate children has remained full during the year, the number of children on the roll in December being 32 boys and 27 girls. Of these, 27 pupils were suffering from chest complaints consisting mostly of cases of asthma and bronchitis. There is no doubt that children suffering from these conditions derive much benefit from their stay at Periton Mead and the

improvement in the state of health of most of them is quite remarkable. Apart from these cases quite a number of children were accommodated whose health had been affected by poor home conditions.

In spite of the improvement in social conditions generally, it is evident that Periton Mead continues to meet a demand which will continue in the foreseeable future. Apart from the requirements of Bristol there is a steady request from outside Authorities for places in this school, and of the 59 pupils on the registers at the end of the year 9 came from other Authorities (5 boys and 4 girls).

South Bristol Open Air School

C. Williams

The school roll at the end of the year was made up as follows:—

	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Delicate	32	13	45
Physically handicapped	45	28	73
Partially-sighted	14	5	19
	<hr/> 91	<hr/> 46	<hr/> 137

The number of boys has increased, and this makes extra difficulties when the sexes must divide for certain subjects.

The new system of grading reported last year seems to be working well and school has settled down to its new routine.

A main problem in a school of this type is how best to deal with children of below-average intelligence or with other special learning difficulties. A pupil of average intelligence or above can frequently cope with the regime of a normal school and it is proper that he should remain there. But when he drops behind his fellows then he very often seems to come to the Open Air School.

This, too, is right; his obvious physical disability or an emotional mal-adjustment is the justification. It is, however, very important that he comes before he is too discouraged and that the parent does not expect too much of the school where the child is of very limited ability.

With much of our work being with the dull and backward it makes it difficult to deal properly with the few above-average children. To deal with one exceptionally bright pupil (I.Q. 155 on the Wechsler Scale) the Education Committee has sanctioned some special tuition in mathematics. Here is a pupil who is unfortunately so disabled that no residential school could be asked to take him.

The assistance given by those outside the school staffs has increased. The domestic science teacher now visits for six instead of three weekly sessions. Very welcome help has been given by the psychologist, the speech therapist and the peripatetic teacher of the deaf. A Sister from the William Budd Health Centre is able to visit the homes of children who have particular difficulties.

A Parent-Staff Association has been formed and it is hoped this will thrive and give increasing help to the pupils we serve.

Physical education in a school of this type is not easy so it is a pleasure to be able to report that archery is now so well established that pupils were able to challenge and beat the staff. Swimming was also continued into the Winter months, as a trial, and attendances have kept up fairly well.

The school has had as great a total and variety of visitors as before. But when the pupils have forgotten the students from Uganda and Somaliland, the other visitors from India, Yugoslavia and Hong Kong then they will remember Father Christmas who dropped into the school garden by Army helicopter.

Groups from the school have made several educational visits. Two parties visited the Zoo and another two groups enjoyed cruises around the City docks. Other children have travelled by bus or car to see special points of interest in Bristol. Senior pupils were able to accept Connaught Road Girls' School's kind invitation to see the dress rehearsal of their Christmas Show. As well as the obvious worth of these visits it is also not without value to carry out the exercise of moving physically awkward children between two points. For some, practice will never make perfect; but it will help.

Home Teaching

Miss Watkins and Mr. Keyes continued their work with the home-bound pupils. As at the parent school, South Bristol Open Air, the boys greatly outnumber the girls; fifteen boys were being visited at the end of the year and only five girls. The teachers' joint annual total of visits was 1,755.

Twenty-one names were taken off the roll during 1959, for the following reasons:—

	<i>Boys</i>						<i>Girls</i>
Returned to ordinary school	7	3
Admitted to Day Open Air School	4	—
Admitted to hospital	3	1
Found ineducable	1	—
Of age	1	—
Died	—	1
						<hr/> 16	<hr/> 5

A coach outing to Longleat House was enjoyed by all the children and those parents who were able to join the party although the day picked was not one of the best of that fine summer.

Three home pupils were also able to join one of the Open Air School's boat cruises around the City docks, and, as usual, some were able to visit the school's Christmas festivities.

This service is obviously a very valuable one for the City's children who are unable to attend school. It is also of importance to parents of these children.

Hospital Teaching

Mr. Haigh left the service at Easter, on promotion to the headship of Frenchay Hospital School and was not replaced until after the Summer holidays. So the bulk of the term's work was borne by Mr. Meese, although a teacher from South Bristol Open Air School was able to visit Southmead Hospital on three afternoons weekly to provide the usual coverage there.

An important improvement was made at the Children's Hospital, where the largest number of child patients have to be dealt with, when a small room was freed for teaching. Mr. Meese has made good use of this schoolroom. Small groups of pupils have been able to use school sound and vision broadcasts. It is very important, too, that ambulant patients now have a place where they can move from the atmosphere of a ward to that of a schoolroom and we are grateful that this facility has been given.

A new Children's Unit is being built at the Bristol Royal Infirmary but until this is ready and occupied there will be a smaller demand for teaching. During the whole of 1959 only 47 children were taught in 205 visits to this hospital. However some patients were transferred to Bristol General Hospital and two boys were visited there during the last two months of the year.

The total number of children visited during the year dropped from 720 to 634, but they were from as wide a variety of schools; 168 were from infant schools, 344 from junior schools, 89 from secondary modern schools, 32 from grammar schools and one from a technical school.

The replacement teacher, Mr. Parfitt, joins Mr. Meese in paying tribute to the efforts made by the Hospital staffs to ensure that their teaching visits are interrupted only when essential.

Report of the School Medical Officer

P. Tomlinson

The number of pupils on the roll at the Open Air School at the end of the year was 118, of whom 73 were classified as physically handicapped and 45 as delicate. Some of the common conditions for which children were attending the school were:—

Post poliomyelitis paralysis	..	..	..	..	19
General debility	..	..	..	..	17
Cerebral palsy	..	..	..	..	15
Asthma and bronchitis	..	..	..	..	12
Muscular dystrophy	..	..	..	..	8
Congenital and acquired heart disease	..	..	..	..	7
Miscellaneous	..	..	..	..	40

The first, and largest single group is that of old poliomyelitis cases consisting chiefly of children in the older age groups and this type of case is expected to diminish in the future. Apart from this there does not appear to be any falling off in the demand for places. One particular class of child, those whose delicacy may be said to result from maladjustment, appears to be increasing, possibly because there does not seem to be any other place to send these children. It is however felt that a school with a fair proportion of physically handicapped children is not a very suitable place to admit children who, in some cases, have aggressive tendencies. The presence of children who have been found unsuitable for ordinary school because of behaviour problems such as aggression, disturbance in class or dirty habits is not fair on children who are in this school for physical handicaps or because of genuine delicacy. The argument may be put forward that the ratio of staff to pupils is so much higher in this school than in ordinary schools, that the handling of maladjusted children is therefore easier. This may be so but the attention which the teacher has to give to the behaviour problem child is at the expense of the physically handicapped or delicate child.

The question of whether a child suffering from the less severe forms of physical handicap or delicacy should be admitted to this special school should be most carefully considered. The reason is that this type of school offers disadvantages as well as advantages. The disadvantages are that the less severely handicapped pupil will be removed from his normal school life and put into a sheltered existence where there are a considerable number of severely handicapped children. This deprives the more normal child of the competitive standards of the ordinary school and may not improve his attitude of mind to his handicap.

An innovation during the year has been the appointment of a health visitor who attends weekly on the medical officer's visiting day. This has greatly assisted in the follow-up of cases in the home and liaison with parents. The orthopaedic specialist has continued his visits once a term during the year.

Epileptic Children

A.L.S.

One of the two boys who were being maintained by the Authority at Lingfield Hospital School for Epileptic Children left during the year, having been referred to the Mental Health Authority under Section 57 (3) of the *Education Act*. At the end of the year therefore there was only one boy in

attendance at the school. There is no doubt that with modern drug treatment most of the children with epilepsy are able to continue at ordinary or day special schools, and the need for residential placement has markedly diminished in recent years. There were three children suffering from epilepsy associated with other physical defects attending South Bristol Open Air School at the end of the year, and the school seems well able to cope with these cases. It is thought that there are about eighty-five children with varying degrees of epilepsy, mostly petit mal, who attend the ordinary schools and these also do not seem to present any great problems to the teaching staffs.

Spastic Children

Grace E. Woods

Cerebral Palsy Assessment Clinic

This has been another interesting year for the Cerebral Palsy Assessment Clinic. There have been 54 new cases during the year, very young children who are brought to our notice through the infant welfare and hospital follow-up Clinics, and also mild cases of motor defect noted at ordinary school. Because of the increase in the work, the whole time service of another physiotherapist has been obtained. She is working for a few sessions each at the Bristol Children's Hospital, and Hortham Hospital, and also gives three sessions per week at Claremont School. This type of co-ordination between the Hospital and the School Health Service is very valuable. Members of the physiotherapy and occupational therapy department of the Children's Hospital always attend the clinic, and discuss and give their observations on the cases they treat.

There is a continuous follow-up of old cases, many of whom have attended for years. A wide variety of needs is expressed by the parents. This ranges from a request for a downstairs lavatory at home to concern over lack of progress at school. Mr. R. V. Saunders, Senior Educational Psychologist, sees all the old cases from time to time. Because of the brain damage, many children, even those with a mild physical defect are showing learning difficulties, and in such cases Mr. Saunders or a member of his team of psychologists visits the schools to look into the problem. Several children are benefiting by remedial coaching at the Child Guidance Clinic.

The team at the Clinic, and the staff at Claremont School have become increasingly conscious of the home difficulties with many of these children, and we are very grateful that Dr. Smallwood has secured the appointment of Sister N. Paget to give a half of her time for this work in all parts of the City. She is continually bringing to our notice physical needs as well as emotional problems of the children.

The needs of the older cerebral palsied child are becoming more pressing, particularly as the children at Claremont School are approaching school leaving age. Next year, it is hoped that some definite provision will be made for their employment when they leave school. Through voluntary effort we hope to have a work centre provided for the severely handicapped.

The provision of care for the ineducable cerebral-palsied child is also being considered on a national scale by the British Council for the Welfare of Spastics, and the National Spastic Society. There is provision for non-ambulant ineducable children at the Bristol Spastic Centre, and about 20 parents are able to use this facility for day-care. There is an increasing demand for institutional care by parents who conscientiously feel that the child's presence in the home is detrimental to the other children. There is an acute waiting list of this type of child for admission to a Mental Deficiency Hospital and the numbers are sufficient to warrant special provision.

Apart from the physical and educational care of the child, the members of the team are interested in problems of research, and are committed to helping in various projects. Miss Ram is on the Joint Educational Committee of the National Spastics Society and the British Council for the Welfare of Spastics, and Mr. Saunders on the Intellectual Assessment Sub-Committee of the National Spastics Society. I am a member of the Medical Advisory Committee of the British Council for the Welfare of Spastics, and all of these Committees are concerned with research projects. During the year, Dr. Paul Polani, Research Physician of the National Spastics Society has visited Bristol to obtain palm prints of cerebral palsied children as part of an investigation into antenatal and perinatal etiology. Dr. Alison McDonald, assistant research physician has been given details of Bristol premature cerebral palsied children for research into the factor of prematurity. Bristol's and Sheffield's figures are being combined for an investigation on birth weights, twins and social classes.

At the end of the year Dr. Helen Gibb left the Assessment Clinic team, and we are very pleased to welcome Dr. W. M. Sutcliffe, another member of the Authority's medical staff, in her place.

Claremont School for Spastic Children

M. Ram

This year Claremont has for the first time come under the care of a board of managers, who act also for Elmfield School for the Deaf, and for South Bristol Open Air School.

In the Summer term two children at Claremont attended Henleaze Junior School part-time, while continuing treatment with us. We wished to see how they would react to normal classroom conditions. The experiment was sufficiently successful for the children to be transferred to the ordinary schools in their areas, and they are both doing well. This Autumn a younger boy started to attend Henleaze Infants' School for half the day. These trials are of great value and we are most grateful to the Henleaze schools for making them possible.

During the year a film has been made of the work at Claremont. It was made with the help of the Regional Hospital Board and it was produced and shot by Mr. Grosset, of the Bristol Amateur Ciné Society. It is in colour, and shows the work of assessment, teaching, physiotherapy and speech therapy, as well as the general life of the school. We are pleased to hear that this film has been awarded a place among the ten best amateur films of the year.

Our most important development in 1959 was the establishment at the commencement of the Autumn term of the Senior Unit, planned in the previous year. This is intended for the severely handicapped older children, who will need to remain in a special school for cerebral palsied children throughout their school life. In September nine children moved into a classroom vacated by the Henleaze Junior School, to begin the secondary stage of their education, under a newly-appointed teacher.

One of the aspects of this work is to help the children to live with their handicaps, and to train them towards physical independence. An important part of the Unit is a housecraft section, comprising a bed-sitting room and kitchen designed by Miss Dane, the Organiser of Domestic Science, where the normal school equipment is specially adapted when necessary to the needs of these children. A domestic science teacher and an occupational therapist come one day a week to give instruction, taking the children singly, or in groups of two or three. There are this year only two boys in the Unit, and they are at the moment as much interested in domestic matters as are the girls, but we hope that provision for the teaching of a suitable craft for boys will soon be made.

At this time the number at the school was raised to 40, so three extra physiotherapy sessions a week were granted. With the older children provided for it was possible to re-organise the juniors. In the 7—10 age range we now have one group of children who can take ordinary classroom teaching, and another of these with more serious learning difficulties, who need to be taught individually.

A number of school visits have been made to Barrow Court and the seaside, to Colston Hall concerts and to the ballet, and these have all been much appreciated.

At the end of the year there were 40 children on the registers, 17 boys and 23 girls; 10 of these are from neighbouring Authorities.

HEART DISEASE AND RHEUMATISM

C. Bruce Perry

There is very little to report about the Cardiac Clinic except that the work has continued on the usual lines during the past year. There has been a slight decrease in the number of new cases. The majority of the children who have had acute rheumatism in the past three or four years are now successfully receiving prophylactic treatment to prevent relapses and this should prevent any further damage to their hearts. As many of them have recovered from their first attack with a minimal or no heart lesion the ultimate outlook in these cases should be good. The problem of sore throats which was discussed last year remains. One of the difficulties is that without proper bacteriological studies it is not possible to determine whether or not any given sore throat is streptococcal in origin and thus likely to produce an attack or exacerbation of acute rheumatism. All possible encouragement should therefore be given to parents to seek medical advice for sore throats and to doctors to investigate all such sore throats bacteriologically.

Summary of School Cases attending Cardio-Rheumatic Clinic, 1959, including Primary, Secondary, Nursery and Special Schools

	<i>No treatment or restriction</i>	<i>No treatment but restriction of games, etc.</i>	<i>Treatment and school</i>	<i>Treatment and exclnde from school</i>	<i>Institutional treatment</i>	<i>Total</i>
<i>New cases:</i>						
Rheumatic heart disease	2	—	—	—	14	16
Chorea	—	—	—	—	—	—
No organic disease ..	18	—	—	—	—	18
Congenital heart disease	3	1	—	—	—	4
Various	—	—	—	—	9	9
	23	1	—	—	23	47
<i>Re-examinations:</i>						
Rheumatic heart disease	209	3	2	—	3	217
Chorea	1	—	—	—	—	1
No organic disease ..	332	—	—	—	—	332
Congenital heart disease	57	12	1	—	—	70
Various	—	—	—	—	6	6
	599	15	3	—	9	626
No. of individual children examined	..	..	..	..	382	
No. of new cases for 1959	..	..	..	..	47	
No. of re-examinations	..	..	..	..	626	
Total number of attendances	..	..	..	..	673	

INFECTIOUS DISEASES

A.L.S.

The year 1959 was a heavy one for measles cases, there being 2,058 cases amongst children of school age, and 3,281 pre-school age children—a total of 5,339 as compared with 2,720 in 1958.

Whooping cough cases were about the same in total as in 1958, but there were more among the under school age group than among school age children.

Scarlet fever cases were fewer than in the previous year, and again the tendency for the disease to occur to a greater degree among children of the under school age group was noted. The details of the numbers of cases occurring amongst school children and pre-school age children during the year are as follows:—

		<i>School age children</i>	<i>Pre-School age children</i>
Measles	.. ..	2,058	3,281
Whooping cough	.. ..	74	150
Scarlet fever	.. ..	173	80

Admissions of patients of school age to Ham Green Hospital during the year totalled 195, the average stay of patients being 21.6 days.

Poliomyelitis Vaccination

Among children of school age 10,600 received a full course of two injections against poliomyelitis and 43,058 received a booster injection during the year. The total number of school children who have been given this protection is now 60,988 out of a total school population of 66,500, which shows that a very gratifying proportion of the school population has been protected against this disease. There were 5 cases of poliomyelitis amongst children of school age during the year (4 of the paralytic type and 1 of the non-paralytic type). All of these were in unvaccinated children. This compares with 1 case in 1958.

Immunisation against Diphtheria

The arrangements for the immunisation against diphtheria of school children were continued as in previous years. Most of the children receive their protection against this disease before reaching school age, but 166 children were given the full course of injections, and 1,530 were given a booster injection during the year. There has again been no case of diphtheria amongst children in the City, and this is the tenth successive year in which this has been the case. While therefore the disease can be said to have disappeared from the City, it is still necessary to keep a high level of immunisation amongst the children in order to prevent the occurrence of any new cases.

MEDICAL EXAMINATION OF ENTRANTS TO THE TEACHING PROFESSION

A.L.S.

In accordance with the arrangements outlined in the Ministry of Education Circular 249, the medical examination of candidates applying for entry to training colleges, and entrants to the teaching profession were carried out by the medical officers of the Local Authority.

During the year 110 candidates were examined in connection with admission to or on leaving training colleges, and 137 teachers were examined on appointments in Bristol or for some other reason. In a further 117 cases the examination was carried out by other Authorities, and this Authority carried out medical examinations for other Authorities in 23 cases.

MEDICAL INSPECTION

A.L.S.

A complete periodic medical inspection was made during the year of 19,530 children attending the Authority's Primary, Secondary and Special schools. The statistical tables relating to these inspections can be found at the end of the report.

Co-operation of Parents

The number of parents present at periodic medical inspections during the year was as follows:—

<i>Age groups inspected (by year of birth)</i>	<i>No. examined</i>	<i>Parents present</i>	<i>Per cent</i>
1954 (and later)	1,017	935	91·94
1953	1,027	868	84·52
1952	3,707	3,220	86·86
1951	1,117	908	81·29
1950	410	284	69·27
1949	836	555	66·39
1948	977	660	67·55
1947	918	624	67·97
1946	1,390	910	65·47
1945	730	369	50·55
1944	1,514	477	31·50
1943 (and earlier)	5,887	1,470	24·97
	<hr/> 19,530 <hr/>	<hr/> 11,280 <hr/>	<hr/> 57·76 <hr/>

Medical Inspections at College of Technology

During the course of the year discussions took place with the Principal of the College of Technology about proposed arrangements for the routine medical inspection of the pupils at the College, and also at the proposed College of Science and Technology when this is opened in September, 1960. It was subsequently agreed by the Governors of the College, and by the Education Committee, that arrangements should be made for the routine medical examination on a voluntary basis of students entering the College in September, 1959. It was agreed, however, that in 1960 it should be made a condition of entry to the College that students should agree to accept routine medical inspection.

Infestation

A.L.S.

The number of individual children found to be infested and the percentage of those children of the school population is again the lowest so far recorded, the percentage figure being only 1·9% for 1959. The figures relating to this year and the five preceding years are as follows:—

	<i>No.</i>	<i>School population</i>	<i>per cent</i>
1954	2,773	63,573	4·4
1955	2,347	65,177	3·6
1956	2,133	65,979	3·2
1957	1,841	66,439	2·8
1958	1,584	66,555	2·4
1959	1,278	66,700	1·9

The intensive campaign which was undertaken in 1958 in certain schools where this problem was still causing concern seems to have had some permanent good effect. The nursing staff still give close attention to these schools and pay frequent visits for the purpose of examining the children. This is particularly so immediately after the holidays when a complete examination of the heads of all the children is carried out. This undoubtedly helps to keep this problem

under control in these schools. The cases now mainly arise from households of the special family type, where home care is poor; it is these families which require constant efforts on the part of the health visitors to ensure that the condition of the children does not relapse. The mothers usually make an effort to get their children's heads clean when action is taken by the health visitors, but unless constant supervision is maintained the condition of the children's heads usually again deteriorates. It is only by the pressure of constant effort that we can hope to make headway in these cases, which happily are becoming fewer each year.

MEDICAL INSPECTION FACILITIES IN SCHOOLS A.L.S.

During the course of the year an enquiry was made into the medical inspection facilities in the schools, and with the agreement of the Chief Education Officer, the Heads of the schools in the City completed a questionnaire on this subject. The results of this questionnaire are as follows:—

<i>Schools built before 1946</i>			
<i>No. replying</i>	<i>No. with separate M.I. room</i>	<i>No. with separate rest room</i>	<i>No. with rest facilities in M.I. room</i>
132	49	4	31
<i>Schools built after 1945</i>			
57	50	6	41

<i>Purposes for which medical rooms are used</i>							
<i>School Health Service (other than doctors' inspections)</i>							
School Nurses examinations	..	..	..	..	..	..	96
Dental inspections	..	..	..	..	..	..	92
Speech therapy	..	..	..	..	..	..	25
Other S.H.S. purposes	..	..	..	..	..	..	45

<i>For purposes other than School Health Service</i>							
Rest room	..	..	..	..	..	..	73
Library	..	..	..	..	..	..	3
Staff room (Teachers)	..	..	..	..	..	..	15
School Secretary	..	..	..	..	..	..	32
Special tutorial	..	..	..	..	..	..	32
Ordinary classes	..	..	..	..	..	..	1
Youth Employment Officer	..	..	..	..	..	..	11
Immunisation	..	..	..	..	..	..	68
Other non-S.H.S. purposes	..	..	..	..	..	..	39
Not used for other than S.H.S. purposes	..	..	..	..	..	..	3

No. of schools where it is necessary to hold medical inspections outside the school—2

Minimum requirements for a satisfactory medical inspection room

The arrangements should provide a 20 ft. unobscured length for vision testing, either in the room itself or diagonally or through a doorway from an adjacent room. The minimum area should be 150 sq. ft. The room should be sited away from, or isolated from, noise, from other classes, singing, gymnastics, etc. There should be a separate waiting room for parents and children and a separate changing room, wash basin (hot and cold) should be provided with toilet facilities adjacent. Good natural lighting and efficient artificial lighting, with an electric power point, are needed. The following furniture and equipment should be provided—

Table and 4 chairs

An examination couch of the dual purpose variety that can also be used as a rest bed.

Screen, if no separate changing room available

Sterilizer

Hooks or racks in changing room for clothing

Floor mat or rug

Cupboard

Filing boxes

First-aid cabinet and long mirror

In schools of up to 100 pupils the medical inspection room could be used also as a rest room. The larger schools should have a separate rest room with wash basin, adjacent toilet and supplementary heating. The following furniture and equipment is desirable for a rest room:—

Bed or couch, with rugs or blankets and pillows

Reclining chair

Receiver

Dressing sanican

First-aid cabinet (if not provided in medical inspection room).

Hot water bottle

The room should be made as cheerful as possible with bright curtains, etc.

It is known that other Authorities have been enquiring into the same subject, and indeed the topic itself has been a matter of general interest to the Ministry of Education. It is important in our view that there should be adequate facilities for medical inspection in all schools, and especially that the larger secondary schools which are being constructed should have in addition adequate rest room facilities for pupils who are taken ill in school.

MILK AND MEALS IN SCHOOLS

T. B. J. Hetherington

A return taken in October showed that 51,330 children at maintained schools were taking milk under the milk-in-schools scheme, a percentage of 82·82 of the number in attendance compared with 87·16 per cent in 1958. The percentage of children taking school dinners increased from 38·55 to 40·65 of the numbers in attendance and by the end of the year the daily number of dinners produced (including teaching and other staff) reached 30,000 per day, the highest ever reached in the City. In all 5,523,625 dinners were produced during the year together with 62,400 snacks at nursery schools and South Bristol Open Air School. Other meals were also provided for numerous functions connected with schools.

A further 7 school kitchens were opened making a total of 100 kitchens and 214 canteens serving 218 school departments. Some 450 full-time and 670 part-time staff are employed.

Mr. Whone, a Senior District Public Health Inspector, gave a further series of talks and demonstrations on hygiene to canteen helpers—*i.e.* staff employed to serve transported meals, and the Health Education Section supplied a large number of a variety of posters and stickers for distribution to kitchens and schools.

All school meals premises which are visited and supervised by the organising staff are reviewed regarding the work necessary for maintenance and improvements annually. The Public Health Inspectors and others also continue their inspections and such work continues to be carried out wherever possible—although improvements are limited by the money available—especially bearing in mind increased costs for each project.

The unusually high temperatures especially during the summer term tended to bring into focus many more of the difficulties. The kitchen staff, however, rose to the challenge and in the main have dealt with the problems of increased

temperatures, storage, varying menus, etc. with initiative. However, should such high temperatures become the rule we must certainly hope for the provision of further refrigeration and cold storage.

Vegetables are tending to become more unpredictable than ever and a cause for concern is the tainting of certain roots by oil—supposedly from tractors or a paraffin spray. Coupled with the extensive use of chemical fertilisers, the flavour and re-action in cooking of some of the vegetables undoubtedly suffers and I would say the “keepability” of such roots has also lessened. Unpalatable though these vegetables may be they are normally certified as being fit for consumption.

MILK, FOOD AND HYGIENE INSPECTIONS F. J. Redstone

The work of the Public Health Inspectors in connection with schools during the year 1959 has been mainly of a routine nature. Nothing of unusual interest has been dealt with but the inspections revealed that continuous improvement is being carried out in connection with the kitchens and canteens of the School Meals Service.

There have been no known cases of food poisoning among school children, but dysentery has been fairly prevalent and at one nursery school a large number of cases of dysentery occurred.

A number of complaints were received from Heads of schools concerning chipped bottles used for the delivery of milk but there were only a few complaints regarding dirty bottles. It is a fact, however, that dairy companies continue to find a large number of bottles returned from schools in such a condition that they cannot be re-issued or have to be separately and specially cleansed.

The 140 samples of school milk (pasteurised) submitted for the phosphatase test were found to be satisfactorily heat treated. The quality and condition of milk supplied was good in spite of the high summer temperatures. The methylene blue reduction test is not applied when the storage temperature after sampling rises above 65° F. and this was the case in 49 samples. The remainder satisfied this test which is applied to ascertain the keeping quality.

In the Annual Report of 1958 an account of the preliminary survey being carried out on a cross section of kitchens and canteens of the School Meals Service was recorded. The object of this survey is to examine premises for compliance with the Food Hygiene Regulations, 1955, and to assess the hygiene standards attained by the food handling staff.

The survey report was discussed at a meeting in 1959, when the Medical Officer of Health, Senior Medical Officer School Health Service, Deputy Chief Education Officer, School Meals Officer and Chief Public Health Inspector were present. Subsequently the Chief Public Health Inspector was requested to continue these inspections, and in addition it was agreed that concurrently an inspection of the Schools Milk Service should be carried out in order to examine the storage, handling and methods of distribution of milk on school premises. When this has been done the Chief Public Health Inspector will submit a report to the Medical Officer of Health and a code of practice may be drawn up.

NUTRITION CLINIC A.L.S.

During 1959 one hundred and one children were seen at the Nutrition Clinic, most of whom were referred because of over weight. In all there were 909 attendances at this Clinic during the year. There has been intermittent mention of the amount of dental decay in school children, especially in relation to the increased consumption of sweets and carbohydrates, especially since the end of the war. In “The Health of the School Child” for 1956/57 reference has

been made to the increasing habit of school children eating between meals, and the increasing problem of the over-weight child. Many secondary schools run tuck shops, and it seems that more have started to do so in recent years. One aspect of this activity is that it is found to be a useful way of raising school funds. Another aspect is that some people believe that children should be encouraged to take their milk by making an occasion of it with the consumption of biscuits and other titbits. It is known that some manufacturers of biscuits have approached school Heads to secure the sale of their biscuits for this purpose, using this argument. It is believed that this practice is now spreading to some of the primary schools also. The dental profession are unanimous that the mid-morning consumption of carbohydrates can only have a harmful effect on the children's teeth, and for this reason alone the practice must be looked at askance. The other feature is that some children tend to rely on a mid-morning snack to repair the deficiencies of their hurried or absent breakfast. A side effect is the diminution of an appetite for the school dinner.

It seems that this practice of a mid-morning snack is fairly well established, and it might be difficult, because it would be highly unpopular, to ban the sale of sweets and biscuits in schools. One possibility that has been considered is that the consumption of other articles of foodstuffs might be encouraged, such as fresh fruits and vegetables in season, dried fruits and nuts. As substitutes it is necessary to have all foodstuffs which will be acceptable, can be easily stored, and are reasonably inexpensive, although we think that this last factor may not necessarily be so important in view of the relatively high amount of pocket money which the children seem to have these days. It will probably be necessary to do a little investigation into the eating habits of children before embarking on a widespread campaign against the evils of the mid-morning snack, and we hope to report on the results of such an enquiry on a future occasion.

ORTHOPAEDIC AND POSTURAL DEFECTS

A.L.S.

Mr. Pridie and Mr. Jones, the Orthopaedic Surgeons of the Regional Hospital Board, have continued to attend at the Central Health Clinic on one session per week each during the year. The total number of children seen continues to decline, though the figure for the under five year old children is approximately the same as in 1958. This shows that the policy of children with orthopaedic disabilities being brought to the notice of the orthopaedic surgeon at an early age is obviously a very good one, as it enables defects to be brought under treatment before they can become established. Mr. Lucas, the Orthopaedic Surgeon, continues his visits once a term to South Bristol Open Air School, to advise on the problems of the physically handicapped children at this school. His advice is always much appreciated by the staff. The details of the children seen at the Clinic during the year are as follows:—

	<i>Age 5 years and over</i>	<i>Age under 5 years</i>
Paralysis (a) Flaccid	39	2
(b) Spastic	25	1
Tuberculosis of bones and joints	1	—
Congenital abnormalities of bones and joints	26	5
Amputations	—	—
Genu valgum	21	33
Various (Flat foot, spinal curvature, etc.) ..	359	55
	<hr/> 471	<hr/> 96

PHYSICAL EDUCATION

J. McA. Milne

There have been further additions during the year to the facilities available for physical education in the City. Some new gymnasia have been built and additional playing fields constructed. The amenities on existing playing fields have been improved with the provision of tennis courts and jumping pits which are gradually being constructed throughout the city. The position concerning men staff in schools remains as it was, good where facilities are excellent, but difficult in secondary schools where facilities are limited, and this is likely to continue for some time.

A variety of courses has been organised during the year, including four primary physical education, two keep-fit, cricket, basket-ball, swimming, modern educational dance, English country dancing, together with a week-end course covering weight training, trampolining and judo, and two courses dealing with camping and outdoor pursuits. At the two keep-fit courses a session for accompanists was included. Two open keep-fit evenings, which have proved most popular, were arranged and over 100 members attended each course. The keep-fit festival was held during the Summer at which various Clubs showed work. As a result of this wave of enthusiasm there are now 27 keep-fit courses for women being held in Bristol. Three Children's Country Dance Parties were held, two in different parts of the City in the Winter and one outside at Ashton Court during the Summer. Over 400 children took part in the dancing which offers an excellent opportunity for children from different schools and areas to meet. Some emphasis has been placed this year on encouraging camping as a branch of physical education in schools, and a supply of lightweight camping equipment was purchased and made available to any school wishing to take parties of boys on short expeditions. This equipment was used extensively during the Summer months and there is every indication that its use will increase in the future.

In the Duke of Edinburgh's Award Scheme more and more boys' schools are now taking part, 15 in the City, and six boys have been presented with their Gold Awards by Prince Philip at Buckingham Palace. The pilot scheme for girls is now in the second year. This year three more schools are taking part as well as the original four. Much enthusiasm is being shown and some progress made.

The Education Committee continue to reserve places on Outward Bound Courses, and select three boys each year to attend. The reports indicate that these boys have gained a considerable amount from their stay of a month at Ullswater and Aberdovey.

A start was made this year in the provision of fixed equipment in the older secondary schools, and it is hoped over a period of years that all these schools will be provided with some fixed physical education apparatus.

Two school netball tournaments were arranged and 40 teams participated. A tournament for the 27 schools who have affiliated to the A.E.N.A. was held, at which the winning team in the "over 15" year age group, represented Bristol in the County matches against Somerset, Gloucestershire and Devon. The "under 15" team was chosen at trials for which over 70 children entered. There are now two "over 15" teams and two "under 15" teams representing Bristol. A new feature has been a course for school girls on umpiring. Over 70 girls attended and of those entering 26 gained certificates.

Lacrosse is now being played in one secondary modern school, the first to play in the country. One match has already been played against Badminton School and the under 14 team is entering for the Lacrosse tournament at Cheltenham. The girls have responded well to the challenge demanded of them

to overcome difficult stick work and there has already been an improvement in their posture and speed of foot as a result. There are signs of the game extending to other schools in the near future.

The demand for swimming instruction is steadily increasing but unfortunately this demand cannot be satisfied as insufficient periods are available at the swimming baths in the City and more facilities are urgently required.

Approximately 20,000 children attend swimming instruction once per week during the Summer months and more than half that number continue throughout the Winter. Only about 10 per cent leave school unable to swim one length. During this year 3,965 four length certificates have been gained. This is a record number to be gained in any one year since the inception of the scheme in 1930. Many Royal Life Saving Awards have also been obtained.

The voluntary organisations continue to develop, and successes have been achieved nationally in some activities, notably swimming where Robert Thomas of St. Mary Redcliffe Secondary Boys' School won the A.S.A. Back Crawl Championship and the English Schools' Back Crawl Championship, and two boys represented England in the "under 15" Schoolboys' Rugger International. Cotham Grammar School were honoured by their judo club being invited to demonstrate at the British National Association of Organisers and Lecturers in the Physical Education Conference at St. Luke's College, Exeter, in July, 1959.

PSYCHOLOGICAL SERVICE

R. V. Saunders

Special Educational Treatment for Educational Retardation

The definition of educationally sub-normal children laid down by the Ministry of Education is as follows. "Educationally sub-normal pupils, that is to say, pupils who by reason of limited ability or other conditions resulting in educational retardation, require some specialised form of education wholly or partly in substitution for the education normally given in ordinary schools". (Ministry of Education Handicapped Pupils and Special Schools Regulations, 1959).

A few years ago checks were made by the Bristol educational psychologists on all 11+ age group pupils who had made minimal scores in the secondary transfer examination. The information obtained from these checks suggested that the average attainment of about 10 per cent of the 11+ age group pupils studied was about the 7½ year level. It is my personal belief that a child requires attainments of at least the 8½ year level to be able to cope with a secondary school course, and that on this factor depends in a large measure the adjustment of the "C" stream child to secondary school life.

In practice we find that the need for special educational treatment begins to become apparent in the first junior school year, and that the main part of the educational effort to deal with "cultural" retardation is concentrated between the 8th and 14th years. Bearing this in mind, for a total Bristol school population of some 65,000 we estimate that between 3,000 and 4,000 children are likely to be in need of additional help in the way of special schools, special classes in ordinary schools, extra individual help in adjustment groups, or in any other way in which it can effectively be given to them. This estimated incidence is very similar to that found in a number of surveys elsewhere.

If this number of children were catered for in the best possible conditions, one would expect to find after a number of years operation, a "preventive" as well as a "remedial" effect; that is to say, the number of severely retarded children reaching the second stage should appreciably diminish, although for a variety of reasons not discussed here, there would always be a substantial

element of what might be called "chronic backwardness" due to such factors as limited ability, poor health, poor attendance, inadequate family support, and a number of others.

How is this problem being tackled diagnostically and in the way of provision of treatment facilities?

In diagnostic work the psychological service has learned that it is better to make a concentrated drive in a limited number of schools than to make a piecemeal attack in all schools. One of the outcomes of this new tactic is that the total needs of individual schools, in order to cope with their particular problems of backwardness, are much better understood. A better picture of the incidence of backwardness in the City as a whole is also beginning to emerge.

On the side of provision for the needs of these children, there are a number of important developments to the credit of the administration in spite of the very considerable difficulties of these times. Needs revealed are being squarely met and the number of special classes is steadily increasing.

One of the most important steps taken recently is the setting up of the in-service training unit at Hillfields Park Junior School, where two highly qualified and experienced teachers help to improve the technical ability and theoretical understanding of teachers who are to take these special classes.

This is the right point at which to say categorically that no scheme would operate effectively without careful selection of the teachers who do this work. It is frequently commented that a class of twenty children must be a "soft option". In fact dealing with learning difficulties, lack of confidence, frustration, social maladjustment, and temperamental problems of such children is one of the most exacting tasks a teacher can perform, and at the same time one of the most rewarding when properly done. A teacher who can do this work well is an educator in the fullest sense of the term. He is helping to prepare for life and citizenship a group of children who with less adequate preparation can provide the bulk of society's misfits and failures. In Bristol the importance of this work is fully realised, and there is a constant demand for teachers of the right sort of personality and aptitude for this arduous and valuable work. Characteristically we find that, although salary increments are offered for teaching in "recognised" classes, these invariably prove less interesting to applicants than the challenge of a particular type of problem.

It would be inaccurate to say that in Bristol anything more than a substantial beginning has been made in tackling the problem of educational failure. It would be equally inaccurate to say that developments to date have led us to be other than optimistic that we can break the back of this problem, and in so doing improve the educational and vocational effectiveness and social well-being of a portion of the school population who can otherwise become social liabilities. In this urgent work we are finding it more useful to be sure in all respects in what we do than to be precipitate.

SPEECH CLINICS

Kathleen Coleman

This has been a full and interesting year, and some progress has been made. Much work has again been done with children who stammer, and they have worked seriously and with interest to put their speech in order. It is still not possible to estimate the value of the method of relaxation used in this area which comprises mainly Bedminster and Knowle, but the results are usually quick, effective and lasting. In several cases the stammers have been controlled on relaxation only. It is interesting to notice how the psychological symptoms adjust as confidence in speech and personality improve.

Work with more seriously handicapped children, who for various reasons are not speaking, has offered some interesting results. In four cases, initial improvement followed the same pattern. For the first time, the child began to sleep all through the night, then did not have to be stayed with until asleep: this was followed by an increase in contentment, general response and confidence. This type of case makes a great demand on time but does suggest the possibility of some rewarding research. Speech, with these cases is, more likely to develop spontaneously, than from a built up practised pattern.

Lorraine, aged four, was considered ineducable, but it was thought that some speech aid might help and she came to us to see us in February. The impression she gave was of a brain-damaged child. At first, she made contact only with her mother, walking stiffly with both legs. At her third visit she was running, and the leg stiffness had disappeared. The next week showed the improved pattern of sleeping, and now Lorraine will start to take herself up to bed, sleeping in her own room. Moving to a new house has not altered this pattern. Gradually her response to other people has improved, and with it self-confidence, so that we now see a little girl who will "play-up" a little and refuse to go home. In June, I took her by the hand to walk downstairs. Her surprised mother said she had never walked downstairs before, always going down backwards on all fours. She has walked downstairs ever since. Some babbling practice was attempted to try and develop some speech, but words of a recognisable pattern are beginning to come. That the infants' school have accepted her on trial is something to be very grateful for, as she appears to be an intelligent child, but lacking speech.

Martin, aged seven, was unforthcoming at school and clinic, refusing to take off his coat or co-operate in any way. Regarding the world through slits of eyes he was a most alarming looking little boy. He has proved to be an exceptionally delightful child, responsive and charming, though still with some defect of speech, and a different child from the one whose mother was daily expecting to be told he was ineducable.

One becomes increasingly aware, with severe cases, of the difficulties underlying and overlying speech itself; these are difficulties which have to be dealt with before any work on speech can be attempted, although frequently speech improves as the difficulties are lessened.

A full day clinic has continued each week at Granby House Clinic.

For a term a full day a week was spent at South Bristol Open Air School and the work there has been reduced. Since June this clinic has had to be suspended, as have the sessions at Knowle Clinic and Connaught Road Junior Boys' School, because three weekly sessions have been commenced at Marlborough House Occupation Centre, and these arrangements have had to be made so as to fit all the work in. These clinics are well worth while and it is hoped that it may be possible to start again with them.

The three sessions each week at Marlborough House have proved interesting.

R.P., a lad of fourteen, who did not speak, left one with the impression that he was well able to do so. After six weeks treatment, it was reported that he was occasionally speaking to other children and had been heard calling out while playing in the playground, with quite adequate sentences. After a break of a few weeks, while being treated together with another boy, he spoke adequate well formed sentences almost non-stop for half an hour. It has not been possible to maintain this, but there is a report of increasing speech in school life. This

spontaneous speech is normal, but in naming objects from pictures he resorts to "baby" language, and one day, to the therapist's amazement he pointed to the word "baby", said "baba", and left her wondering how much he could read.

Statistics

No. of new cases—stammerers	..	..	..	..	15
No. of new cases—speech defect	..	..	..	..	59
No. of cases discharged	..	..	..	..	46
No. in attendance 1st January, 1959	..	..	..	..	25
No. in attendance 31st December, 1959	..	..	..	..	53
Total No. of attendances	..	..	..	..	1,305
No. of children treated during year	..	..	..	..	99

Anne Johnson

During the year speech therapy sessions have been held at the Mary Hennessy Clinic, Hartcliffe; John Milton Clinic, Brentry and Henbury Manor Special School, as well as at Argyle Road Speech Clinic.

The Hartcliffe Clinic is usually well attended. There is a great need of speech therapy in this area and more sessions would be welcomed to cope with the long waiting list.

A weekly session at the John Milton Clinic was begun in June. The Clinic is conveniently situated and children attending for treatment miss very little school time. Also, a good liaison with the schools has been established and it is possible to meet and discuss with members of the staff problems that arise, without disturbance of the usual routine.

At Henbury Manor Special School, though there are few children with severe speech defects, progress is slow. The chief difficulty is that because of the distance from the homes no contact with a parent is possible. It is important to be able to discuss problems with them and practice, when recommended, should be carried out daily. Though teachers are always willing to help, their time is limited and they have not the same interest in a child as a parent would have. One member of the staff of the school has become interested in the importance of speech training and is organising various activities, which it is hoped will improve the general standard of speech of the children and eliminate the minor speech defects.

The majority of the patients attending Argyle Road Clinic come from the Bristol 5 area. Defects are mainly ones of an articulatory nature.

Quite a number of cases referred, especially the ones under school age, do not require regular treatment. It is found that advice to the parents on how to handle the child at home is more helpful. The progress of these cases is checked regularly and if a spontaneous improvement is not shown, treatment is begun at an age when the child is more responsive.

Statistics 1959

No. in attendance January 1959	..	..	..	..	53
No. in attendance December 1959	..	..	..	..	41
No. treated throughout the year	..	..	..	..	85
No. discharged	..	..	..	..	44
No. "resting"	..	..	..	..	20
No. of attendances	..	..	..	..	1,083

Types of cases attending December, 1959

Articulatory defect	..	..	..	..	..	22
Stammer	..	..	..	..	..	6
Retarded speech	..	..	..	..	..	9
Cleft palate	..	..	..	..	..	4

Helen M. Streat

Consolidation of the existing clinics has continued throughout the year at Argyle Road Speech Clinic and at Portway and Southmead Health Clinics, and since September two sessions a week have been held at Southmead as the waiting list for speech defective children in the Southmead area was becoming increasingly long.

The weekly session at St. Philip's Marsh Nursery School was discontinued at the end of the Summer term, and the few children whose speech was not then adequate were transferred to the Argyle Road Clinic.

In February work was started at the House in the Garden Special School for senior girls. Here a full weekly programme allows time only for a brief period of treatment, but with the sympathetic help and encouragement of Miss Bond and her staff the work has been most rewarding. It has perhaps been rather more difficult in this school than it is in the normal school to draw the fine distinction between those in need of speech training and those whose speech is defective.

A new venture begun in April was the formation of a Stammerers' Club for teenage boys. Under the guise of the name "Club", group therapy has been given with considerable success!

The club has met every third Wednesday from 6.30—8.0 p.m. in the Speech Clinic at Argyle Road and though the numbers attending have been small it has proved to be a well worth-while experiment. Fluency of speech has not always been achieved or maintained, but it has been noticed that the boys have shown a marked advance in social and emotional stability.

John, a fourteen-year old Grammar School boy, has shown much improvement in this respect. His stammer, though not severe, had been a great handicap. Sensitive, and self-conscious to an extreme degree he seemed quite incapable of making friends either at school or at home. However in the relaxed and congenial atmosphere of the group he has gained enormously in self-confidence and social maturity, and it has been encouraging to see in him occasional signs of aggression!

Statistics for 1959

No. in attendance January 1st, 1959	..	..	..	61
No. of new cases	..	..	..	62
No. of cases discharged	..	..	..	52
No. of cases under observation	..	..	..	18
Total No. of cases treated	..	..	..	123
No of cases receiving treatment December 31st, 1959	..	..	..	53
Total No. of attendances	..	..	..	1,584

Cases receiving treatment December 31st

Stammer	..	..	..	..	..	..	8
Cleft palate	..	..	..	..	..	..	4
Dysarthria	..	..	..	..	..	..	1
Delayed speech	..	..	..	..	..	..	1
Dysphonia	..	..	..	..	..	..	2
Partially deaf	..	..	..	..	..	..	1
Dyslalia	..	..	..	..	..	..	36

Speech Therapy at Claremont School for Spastic Children

Beryl Saunders

There has been further expansion at Claremont School during the past year. In September, when the unit for senior children was opened the number on the registers of the school was increased to 40, and this has meant an increase in the number of children needing speech therapy. As a result there was necessarily

a drop in the amount of treatment received by each patient. It is felt, however, particularly with the younger ones, that frequent short treatment sessions are more beneficial than one long period, and the time-table has been adjusted accordingly.

In July, Mrs. Bobath paid a visit to the school, and although primarily concerned with the physiotherapy department, was able to offer invaluable advice on the handling of those children needing both physio- and speech therapy.

Mrs. Stephens, the teacher of the deaf, assisted by myself, re-tested most of the partially deaf children during the year, and in most cases, previous findings were confirmed. One child was found to have a less severe loss than previous tests disclosed, and, as she has very limited language, the possibility of expressive dysphasia cannot be ruled out.

The extreme difficulty in diagnosing some of the children is illustrated by the following case. A.H. a boy aged 10 years is a moderately handicapped athetoid. A partial hearing loss is suspected, but has never been proved. He is considered educable, but at present is grossly disturbed emotionally. He has very little spoken language and until recently seemed unaware that his jargon utterance was unintelligible to others; it obviously has meaning for him. Understanding appears unaffected. He has highly developed use of gesture. An expressive dysphasia is suspected. Although chewing, sucking and swallowing movements are almost normal, he has grossly defective articulation, and has great difficulty in placing his lips and tongue in a given position at will. This indicates a dysarthria, combined with articulatory apraxia.

There are, therefore, many possible reasons for this boy's severe speech and language defect. These may be emotional instability, some degree of intellectual retardation, partial hearing loss, dysarthria due to athetosis, articulatory apraxia, and dysphasia. It is probable that all these factors play a part in causing the general condition, but, as can be seen, the picture is an extremely complicated one.

We have been much concerned recently about the poor general standard of dental hygiene and care in the school. A dental inspection in November revealed that the majority of children required treatment. Some of these are particularly difficult to treat, being severely handicapped athetoids. These children are unable to chew and swallow normally, and therefore food often remains in the mouth, adhering to the palate or the teeth and gums. Inadequate or lack of cleaning naturally leads to premature decay and consequent loss of teeth.

Figures for the past year are given below:—

No. of cases 1st January, 1959	..	..	..	..	17
No. of new cases (including 1 under observation)	..	..	..	..	10
No. of cases discharged	..	..	..	..	6
No. of cases 31st December, 1959	..	..	..	..	21
Total No. of children treated in 1959	..	..	..	..	27
Total No. of treatments in 1959	..	..	..	..	1,349

Reasons for discharge:—

Much improved	..	..	..	..	..	2
Left school	..	..	..	..	..	3
Deceased	..	..	..	..	..	1
Total	..	..	..	..	..	6

SPEECH THERAPY

M. R. Alderson

1. *The Development of the Service*

In 1906 the Manchester Local Education Authority began to provide treatment facilities for school children suffering from stammering. This was the start, and the spread was at first rather slow; by 1924 there were still only about 30 local Education Authorities providing treatment facilities. By 1939 this figure had trebled, and at the end of the war just over a third of the Local Authorities in England and Wales had appointed speech therapists.

It is interesting to recall that at the Annual Meeting of the Association of Education Committees at Brighton in 1933, the following resolution was submitted by the Stockton-on-Tees Education Committee: "That in view of the serious handicap to children with defective speech (stammering, etc.), and of the success that has attended the efforts made by certain Education Authorities to remove such disabilities, the Executive Committee of the Association of Education Committees be urged to press upon the Government the desirability of making provision for meeting the special needs of such children compulsorily" (ref. 1).

With the introduction of the *Education Act 1944* and the *Handicapped Pupils and School Health Service Regulations 1945*, the provision of speech therapy for pupils suffering from a speech defect became compulsory; such special training and treatment to be given by a duly qualified speech therapist.

Pupils suffering from a speech defect are now defined as "Pupils who on account of defect or lack of speech not due to deafness require special educational treatment (ref. 2). Not all children with a defect of speech, however, require speech therapy, and as is described later there is need for investigation into the cases of children who are border-line speech defectives who may or may not require speech therapy.

The College of Speech Therapists was founded in 1945 by the amalgamation of the Association of Speech Therapists and the British Society of Speech Therapists. The college is the sole examining body recognised by the Board of Registration of Medical Auxiliaries; a speech therapist has to be admitted to the register of Medical Auxiliaries in order to be employed by a local Education Authority. Thus at the same time as the provision of speech therapy for children with speech defects became compulsory, the training and examination of therapists was consolidated.

At this time the report of the Chief Medical Officer of the Ministry of Education (ref. 1) emphasised the need for research and a more critical assessment of the results of treatment. There has however been little published on the basic problems: the incidence of speech defects, the standard of staffing, and the factors associated with speech defects.

2. *The Incidence of Speech Defects*

"The Health of the School Child 1939-45" quotes some figures, thus "experience shows that from 0.5-1 per cent of English schoolchildren stammer and that 1-2 per cent have speech defects that require treatment". There is no reference to the source of these figures and when they were obtained. The most recently published survey of English school children took place in London before the war, and it was found that about 5 per cent of the total school population suffer from speech defects, and about 1 per cent from stammering (ref. 3).

There has been considerably more published work from Scotland and Anne McAllister has published figures for three surveys in 1927, 1931, and 1932

(ref. 4). There has also been a complete survey of all school children in Dumbartonshire in 1948-49 (ref. 5).

The figures from these published surveys cannot be taken to apply to the South of England now, as it is a well-known fact that the incidence varies from area to area.

3. *Standard of Staffing*

"The Health of the School Child 1939-45" states that a population of 10,000 school children justifies the appointment of a whole time speech therapist, and this appears to be the recognised figure. However, the Advisory Council for Education in Scotland (ref. 6) in 1951 recommended that the speech therapeutic services be extended as rapidly as possible to meet the standard of one speech therapist for every 8,000 pupils on the school rolls.

4. *Investigations Required*

Until an up-to-date figure for the incidence of speech defects is known, an extension of the service cannot be planned. Surveys are required throughout the school population to show the incidence in the 5-7 year age group, and the decreasing incidence in the higher age groups. The 5-7 year group has the highest incidence, and is the optimum age for commencing treatment; some of these children will correct spontaneously because of the maturation effect without treatment. Van Riper (ref. 7) gives a list of eight pointers which indicate that the child's speech will correct spontaneously; but further clarification is required and can only come from successive surveys of the children.

There is also the need for further investigation in England into the background of speech defectives along the line of the Newcastle Survey (ref. 8). The investigation into associated socio-economic factors was not carried out on a large enough number of children to provide adequate data.

References

1. The Health of the School Child 1939-45 pp. 76-81.
2. The School Health Service and Handicapped Pupils Regulations 1953. Part III para. 14 (i).
3. Dr. Cyril Burt "The Backward Child", Chapter XI. London University Press 1939.
4. Anne McAllister "Clinical Studies in Speech Therapy" Chapter I. London University Press 1937.
5. Maud Wahl "Speech". April, 1951.
6. "Pupils Handicapped by Speech Disorders". A report of the Advisory Council on Education in Scotland; Cmd. 8426.
7. Van Riper and Irwin "Voice and Articulation" pp. 68-96 1959. Pitman Medical Publishing Co.
8. M. E. Morley "The Development and Disorders of Speech in Childhood." Edinburgh E. & S. Livingstone 1957.

SUNLIGHT CLINIC

A.L.S.

During the year 65 children of school age, and 4 children from nursery schools attended the Artificial Sunlight Clinic. The conditions treated were mostly general debility, bronchitis and other chest troubles. The number completing the course of treatment during the year was 53 children of school age and 4 from nursery schools, and there were 16 children, 12 of school age and 4 from nursery schools, under treatment at the end of the year.

TUBERCULOSIS

Children's Contact Clinic

Mary D. Gibson
D. J. Sheerboom

There has been no change in the organisation of this clinic during 1959.

The view that prophylactic chemotherapy is necessary during the active stage of primary tuberculosis to safeguard against later involvement of skeletal and renal systems, etc., received strong backing at the World Tuberculosis Conference held during the Summer of 1959 in Istanbul. The opinion of a group of American doctors published during 1959 that primary tuberculosis was harmless was based on figures and opinions of the earlier years of this century and has not been corroborated by the facts which the long term follow up of their own cases by chest clinics has repeatedly demonstrated in recent years.

In Bristol we have continued to treat all cases of active primary tuberculosis coming to our notice with P.A.S. and Isoniazid which are prescribed for the children by their family doctors through the National Health Service.

Thirteen children received treatment at home in this way during 1959; those of school age all continued to attend school and take part in all school activities except swimming lessons.

Three children were admitted to hospital for treatment, one of whom required a lobectomy after preliminary chemotherapy.

During the year, 1,089 attendances were made at the clinic; as in past years the majority of these were by children having check up examinations for old infections.

One hundred and forty-eight children were discharged as being no longer in need of further follow up.

B.C.G. Vaccination of School Children

Mary D. Gibson
P. Tomlinson

The annual programme of tuberculin testing and vaccinating school leavers was carried out in the schools during the Spring and Autumn terms of 1959.

During the Spring of 1959 some 2,000 children reached the age of 13 and were offered B.C.G. vaccination and were listed under the Ministry's scheme. During the Summer the Ministry advised the extension of the scheme to include all school children and young people from their 13th birthday upwards who were attending schools or training colleges or who were engaged in work involving possible contact with tuberculosis. The majority of private schools, teacher training colleges and ecclesiastical training colleges in Bristol had already expressed a wish to join the scheme and, during the Autumn term of 1959, a start was made on these new schools and colleges in addition to covering all the Local Authority schools usually visited each Autumn term. The numbers in the Local Authority schools were slightly larger than usual in each case as any child over 13 who had for one reason or another missed B.C.G. vaccination in previous years was now eligible under the new scheme.

In the Spring term 1,242 children were tested; 1,036 were vaccinated, 106 had positive skin tests and therefore did not require vaccination. None of these children had active tuberculosis but several will be kept under observation as they had very large (over 15 mm. diameter) reactions to their skin tests. Once again this age group remained remarkably free from possible complications of B.C.G. vaccination such as axillary or supraclavicular adenitis.

The percentage of positive reactors to the initial skin test, children who had already suffered a primary tuberculosis infection before the age of 13, was 8.53 per cent in the Spring term of 1959. This compares with 9.01 per cent in 1958.

The figure has fallen steadily since the commencement of the arrangements in 1954 when the figure was 17·2 per cent.

During the Autumn term 1959, 2,901 children and young adults were tested and 2,611 of these were vaccinated; the other 290 had positive skin tests and did not require B.C.G., *i.e.* 9·99 per cent of those tested were already positive reactors. This slight increase over the Spring term was due to the inclusion of the older age groups attending training colleges under the new Ministry scheme. Two adolescents in this group of positive reactors had active tuberculosis; one was admitted to sanatorium and one is being treated at home.

One child who had had a successful B.C.G. two years previously was admitted to hospital with tuberculosis during 1959.

The total figures for the year were as follows:—

	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
No. tested	2,141	2,002	4,143
No. vaccinated	1,821	1,826	3,647
No. positive	220	176	396
Percentage positive	10·27%	8·79%	9·55%

The percentage of positive reactors since the scheme started in 1954 is:—

<i>Year</i>	<i>Percentage of Tuberculin Positive Reactors</i>
1954	17·2
1955	16·1
1956	13·7
1957	10·9
1958	9·0
1959	8·5

Mass Radiography

A.L.S.

The arrangements for the mass radiography of children due to leave school were continued in 1959. In March, because of a case of active tuberculosis which occurred at one of our secondary grammar schools for boys, arrangements were made for all the pupils at the school to be offered an X-ray of chest. Later a member of the staff at another secondary grammar school was found, during the course of routine X-ray of teachers, to have pulmonary tuberculosis, and arrangements were also made for the boys at this school to be X-rayed. The figures relating to the work of this service during the year are as follows:—

	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Miniature films	2,158	1,193	3,351
Recalled for large films	24	7	31
Normal large films	9	2	11
Significant cases	15	5	20

Analysis of Significant Cases

Of the significant cases, 14 were found on clinical examination to have non-tuberculous conditions as set out below:—

	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Acquired Cardiac Lesion	1	—	1
Bronchiectasis	1	2	3
Bacterial and Virus Infections of the Lungs	4	1	5
Bronchitis and Emphysema	1	—	1
Benign Tumours	1	—	1
Congestive Change	1	—	1
Pleural Thickening	—	1	1
Pulmonary Oesinophilia	1	—	1

The remaining cases were found to have varying degrees of tuberculous conditions as follows:—

				<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Active tuberculosis	..	..	..	—	—	—
Inactive	..	..	..	5	1	6
Under observation	..	..	..	—	—	—

In October the question of the continuance of the routine X-ray arrangements for children was the subject of fresh consideration in the light of the recommendations of the Adrian Committee on Radiological Hazards. It was decided that in view of the extension of the B.C.G. vaccination scheme to include all pupils over the age of thirteen years, the routine mass X-ray of school leavers should be discontinued and that efforts should be concentrated on raising the acceptance rate for B.C.G. vaccination of children in these age groups. If a member of a school staff is notified as suffering from pulmonary tuberculosis, or a child is found to be suffering from an adult type of tuberculous disease, all the children who are contacts should be Heaf tested if they have not already been included in the B.C.G. vaccination scheme, and all positive reactors should have full size films taken.

X-ray of Teachers, and other Staff

A.L.S.

The arrangements for the routine chest X-ray of teachers were continued during the year. Some 711 teachers were X-rayed out of 1,062 who were given appointments. Of these, 21 teachers were recalled to have large films taken. The results of these large films were as follows:—

- 1 case showed active tubercular disease
- 3 cases showed old T.B. disease
- 5 cases showed other conditions
- 12 cases were satisfactory

One other teacher was referred by his private practitioner as suffering from tuberculosis and was found to have active disease.

Though every endeavour is made to give appointments at times which will result in the least inconvenience to the school, and the practice of making appointments for only one teacher at a time from any one school has been continued, there is nevertheless still a high proportion of absentees, the number being rather higher in 1959 than in the previous year. Most teachers now accept the idea of these regular chest X-rays, but some of the older teachers have expressed the view that it is unnecessary in their case, and there is still some fear of X-rays although we have tried to reassure members of the teaching staff on this point.

The arrangements for the periodic routine medical examination of school meals staff, including chest X-ray, were continued during the year, and 725 members of the school meals staff were examined during 1959 under these arrangements.

YOUTH EMPLOYMENT SERVICE

B. M. Dyer

The Employment of Handicapped Children

Fewer pupils left the Open Air School and the School for Deaf Children this year but slightly more physically handicapped children left the Authority's ordinary schools. These include children with disabilities of hearing, eye defects, epilepsy, hemiplegia and asthma. Finding suitable employment has been more difficult than in previous years and one or two of the young people have had several changes of job. All boys and girls leaving special schools for the mentally retarded were given talks and individual advice, and whenever possible their parents were also seen. The majority of these boys and girls were found employment, but too often it has proved to be of only short duration, especially in the case of the boys. There is no doubt that as competition for available jobs becomes greater, the difficulties in finding satisfactory employment for the handicapped increase.

BRISTOL EDUCATION COMMITTEE

Chairman: Alderman R. ST. JOHN READE, O.B.E., M.A.

Vice-Chairman: Alderman MRS. F. M. BROWN

Special Services Committee

Chairman: Alderman MRS. F. M. BROWN

Chief Education Officer

G. H. SYLVESTER, M.A.

**Principal School Medical Officer and Medical Officer
of Health**

R. C. WOFINDEN, M.D., B.S., D.P.H., D.P.A.

**Deputy Principal School Medical Officer and
Deputy Medical Officer of Health**

J. F. SKONE, M.D., D.C.H., D.P.H.

Senior Medical Officer, School Health Service

A. L. SMALLWOOD, M.D., D.C.H., D.P.H.

City and County of Bristol

Population (estimated mid-1959)	..	..	..	..	..	..	436,600
Schools:—							
Number of School Departments	..	..	.	..	..	..	223
Average Number on Registers	..	..	.	..	..	..	66,725
Average Attendance	..	..	..	.	..	..	59,806

STAFF

Principal School Medical Officer and Medical Officer of Health

R. C. WOFINDEN, M.D., D.P.H., D.P.A.

Deputy Principal School Medical Officer and Deputy Medical Officer of Health

J. F. SKONE, M.D., D.C.H., D.P.H.

Senior Medical Officer, School Health Service

A. L. SMALLWOOD, M.D., D.C.H., D.P.H.

School Medical Officers

(Joint Appointments with the Local Health Authority)

Mrs. Monica A. Pauli, M.B., Ch.B., B.A.O.

R. J. Irving Bell, M.R.C.S., L.R.C.P., D.P.H.

Mary Gibson, M.B., Ch.B., D.P.H.

A. M. Fraser, L.R.C.P., L.R.C.S., D.P.H.

B. J. Boulton, M.B., Ch.B.

Clara Jahoda, M.D. (Vienna)

Helen M. Gibb, M.B., Ch.B., D.P.H.

J. E. Kaye, Med. Dip. (Warsaw), D.P.H.

J. L. S. James, M.R.C.S., L.R.C.P. (Anaesthetist)

Kathleen E. Faulkner, M.B., Ch.B., D.C.H., D.P.H.

D. J. Sheerboom, M.B., B.S., D.P.H.

Mrs. Marjorie Mair, B.Sc., M.B., Ch.B.

P. Tomlinson, M.D., D.P.H.

G. N. Febry, M.B., Ch.B., D.P.H.

Audrey B. Stevenson, M.B., Ch.B., D.Obst.R.C.O.G., D.P.H. (to 12.9.59)

J. G. Moran, L.R.C.P., L.R.C.S., D.C.H., D.P.H. (to 9.3.59)

M. R. Alderson, M.B., B.S., M.R.C.S., L.R.C.P., D.R.C.O.G. (from 23.9.59)

Irene L. Chesham, M.B., Ch.B., D.P.H. (from 1.9.59)

W. M. Sutcliffe, M.B., Ch.B., D.P.H., D.I.H. (from 14.9.59)

R. P. Ryan, M.B., B.S., D.P.H. (from 1.8.59)

Part-time School Medical Officers

H. F. M. Finzel, M.D.

C. Jean Fraser, M.B., Ch.B., D.P.H.

Consultants—Part-time

Ear, Nose and Throat	..	H. D. Fairman, F.R.C.S.E., D.L.O. J. Freeman, F.R.C.S., D.L.O.
Orthopaedic	..	K. H. Pridie, M.B., B.S., F.R.C.S.* D. M. Jones, M.B., B.S., M.Ch.(Orth.), F.R.C.S.* H. Keith Lucas, M.Ch. (Orth.), F.R.C.S.E.
Ophthalmic	..	R. R. Garden, M.A., M.B., D.O.M.S., D.P.H. P. Jardine, F.R.C.S. H. Bannerman, M.B., D.O.M.S.*
Cardio-rheumatic	..	C. Bruce Perry, M.D., F.R.C.P. (by arrangement with United Bristol Hospitals)
Dermatology	..	R. P. Warin, M.D., M.R.C.P.* C. D. Evans, B.A., M.B., B.Ch. (Camb.)*
Chiropody	..	L. I. W. Tasker, M.Ch.S.
Orthoptist	..	Miss M. J. Smith, D.B.O.*

Dental Surgeons

(Joint Appointments with the Local Health Authority)

Principal School Dental Officer	..	J. McCaig, L.D.S.
School Dental Officers	.. ..	A. H. V. Williams, L.D.S. H. W. Williams, L.D.S. Alice M. Trump, L.D.S. Helena Blinkworth, L.D.S. J. F. Sellin, L.D.S. R. D. Hepburn, L.D.S. W. E. C. Chaplin, L.D.S. G. D. Everard, L.D.S. (to 31.3.59) M. C. W. Nicholls, L.D.S. J. E. Ramsden, L.D.S. (to 9.10.59) Elizabeth R. Shinkwen, B.D.S. (to 31.5.59) D. A. Ramsden, L.D.S. (from 23.2.59 to 7.11.59) S. Maclean-Harnarayan (from 5.1.59 to 16.10.59) H. Hazell, L.D.S. (part-time)*
Oral Hygienist	.. ..	Jean E. Bailey

Child and Family Guidance Clinic

Senior Consultant	.. .	R. F. Barbour, M.A., F.R.C.P., D.P.M.
Consultant Psychiatrists	. .	W. L. Walker, M.B., Ch.B., D.P.H., D.P.M.* H. S. Coulsting, M.B., Ch.B., D.P.M.*
Psychiatric Registrar	.. ..	W. Johnson, M.R.C.S., L.R.C.P.*
Senior Educational Psychologist	..	R. V. Saunders, M.A., B.Ed.
Senior Assistant Educational Psychologist	..	W. C. King, B.Sc.
Educational Psychologists	.. .	Eleanor J. Horn, M.A., Dip. Ed. Kathleen Craib, M.A., B.Ed.
Psychiatric Social Workers	..	Miss B. Stubbs (Senior P.S.W.) Mrs. L. Gatliff Miss B. Harrison (to 31.12.59) Miss J. Laver Miss P. Birkett Mrs. J. D. Scrine (part-time)

Speech Therapy

Speech Therapists	Kathleen Coleman, L.C.S.T., S.R.N. Helen M. Streat, L.C.S.T. Anne Johnson, L.C.S.T. Mrs. Beryl Saunders, L.C.S.T. (Claremont School)
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Nursing Service

Chief Nursing Officer	Miss L. M. Bendall, S.R.N., S.C.M., H.V. Cert.
Deputy Chief Nursing Officer	..	Miss A. I. Rowbottom, S.R.N., S.C.M., Q.I.D.N., H.V. Cert.

* By arrangement with the Regional Hospital Board.

The following staff changes took place during the year in the joint staff of the Local Health and Education Authorities:—

Medical

- Appointments . . M. R. Alderson, M.B., B.S., D.R.C.O.G. (23.9.59)
Irene L. Chesham, M.B., Ch.B., D.P.H. (1.9.59)
W. M. Sutcliffe, M.B., Ch.B., D.P.H., D.I.H. (14.9.59)
R. P. Ryan, M.B., B.S., D.P.H. (1.8.59)
- Resignations . . Audrey B. Stevenson, M.B., Ch.B., D.R.C.O.G., D.P.H. (12.9.59)
J. G. Moran, L.R.C.P., L.R.C.S., D.P.H. (9.3.59)

Dental

- Appointments . . D. A. Ramsden, L.D.S. (23.2.59)
S. MacLean-Harnarayan, L.D.S. (5.1.59)
- Resignations . . M. C. W. Nicholls, L.D.S. (31.1.59)
G. D. Everard, L.D.S. (31.3.59)
Elizabeth R. Shinkwen, B.D.S. (31.5.59)
J. E. Ramsden, L.D.S. (9.10.59)
D. A. Ramsden, L.D.S. (7.11.59)
S. MacLean-Harnarayan, L.D.S. (16.10.59)

Child and Family Guidance

- Resignation . . Berry Harrison, Psychiatric Social Worker (31.12.59)

Persons other than those whose names appear in the list of staff who have contributed to this report are the following:—

- L. A. Tavener, *Superintendent Welfare Officer.*
Miss T. B. Hetherington, *Chief Organiser of School Meals*
F. J. Redstone, F.R.S.H., F.S.P.H.I., *Chief Public Health Inspector*
J. MacA. Milne, *Chief Organiser of Physical Education*
Miss C. Cooke, *Senr. Woman Organiser of Physical Education*
Miss M. P. English, M.Sc., *Recognized Teacher in Medical Mycology*
R. E. Olding, *Head of Elmfield School for Deaf Children*
R. G. Lewis, *Head of Eastville Junior Mixed School*
Miss R. Smith, *Teacher of the Deaf, Eastville Junior School*
Miss R. H. Sturman, *Visiting Teacher for Partially Deaf Children*
J. N. Tolley, *Head of Russell Town School for E.S.N. Senior Boys*
Miss I. M. Bond, B.A., *Head of the House-in-the-Garden School for E.S.N. Senior Girls*
Miss J. Davis-Morgan, *Head of Henbury Manor School for E.S.N. Junior Children*
Miss M. H. Davies, *Head of Croydon Hall Residential School for E.S.N. Senior Girls*
Mr. G. A. Morris, *Head of Kingsdon Manor Residential School for E.S.N. Senior Boys*
Mr. C. Williams, *Head of South Bristol Open Air School*
Miss M. J. Ram, B.A., *Head of Claremont School for Spastic Children*
Mrs. Grace E. Woods, M.D., D.C.H., D.P.H., *Medical Officer, Cerebral Palsy Assessment Clinic and Claremont School for Spastic Children*
B. M. Dyer, M.B.E., B.A., *Youth Employment Officer.*

SCHOOL CLINICS

<i>Name of Clinic</i>	<i>Address</i>	<i>Clinics Held</i>
Central Health Clinic	Tower Hill, Bristol 2. Tel. 2-6602.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment. Ophthalmic, Orthopaedic, Aural and Dermatological Consultant Clinics, Chiropody Clinic, Enuretic Clinic, Artificial Sunlight Clinic, T.B. Contact Clinic, Children's Chest Clinic.
Charlotte Keel Clinic	Claremont Street, Stapleton Road. Tel. 5-1545.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment.
Bedminster Health Clinic	Wedmore Vale, Bristol 3. Tel. 6-3798	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment. Ophthalmic and Aural Consultant Clinics.
Granby House Clinic	St. John's Road, Bedminster. Tel. 6-4443.	Minor Ailment Inspection and Treatment.
Speedwell Health Clinic	Whitefield Road, Speedwell, Bristol 5. Tel. 67-3194.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment. Ophthalmic and Aural Consultant Clinics.
Portway Health Clinic	Shirehampton, Bristol. Tel. Avonm'th 2900.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment. Ophthalmic and Aural Consultant Clinics.
Southmead Health Clinic	Monks Park Ave., Southmead. Bristol. Tel. 62-6414.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment. Ophthalmic and Aural Consultant Clinics.
Brooklea Clinic	Wick Road, Brislington. Tel. 7-8861.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment.
Knowle Health Clinic	Broadfield Road, Bristol 4. Tel. 7-6643.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment.
Lawrence Weston Clinic	Ridingleaze, Lawrence Weston. Tel. Avonm'th 3205.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment.
William Budd Health Centre	Leinster Ave., Bristol 4. Tel. 6-1112.	Minor Ailment Inspection and Treatment.
Mary Hennessy Clinic	Hareclive Road, Hartcliffe, Bristol 3. Tel. 6-4282.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment.
John Milton Clinic	Crow Lane, Brentry, Bristol. Tel. 62-2160.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment.
Connaught Road School Clinic	Connaught Road School, Bristol 4.	Minor Ailment Treatment.
Verrier Road Clinic	Verrier Road, Redfield. Tel. 5-6387	Minor Ailment Treatment.
Child and Family Guidance Clinic	7 Brunswick Square, Bristol 2. (Headquarters). Tel. 2-6181	
Speech Clinics	1 Argyle Road, St. Paul's, Bristol 2. (Headquarters). Tel. 2-6760 and Knowle Health Clinic.	

APPENDIX A

School Accidents, 1959

C. E. Cooke

As in previous years there are significant differences in accident rate in the different types of schools during the year. The figures of accidents during 1959 in the various types of schools are as follows:—

<i>Type of school</i>	<i>No. of children</i>	<i>No. of accidents</i>	<i>Annual per cent rate</i>	<i>Per cent of accidents involving boys</i>
Grammar	3,499	25	0.7	64
Technical	1,057	30	2.8	97
Bi-lateral	9,621	162	1.7	72
Modern	11,977	124	1.0	77
All Secondary ..	26,154	341	1.3	75
All Primary ..	38,223	266	0.7	65

Boys continue to have more accidents than girls. Boys probably constitute about 51 per cent of the school population as a whole, although of course the technical schools contain a much higher percentage.

The overall accident rate is 0.94 per cent, the same as in the previous year.

The bi-lateral schools found to be "accident prone" in 1958 again show a high accident rate in 1959.

In the accompanying graph of secondary schools showing the number of accidents plotted against the number of children in the school, the highest number of accidents occurred in a bi-lateral school, chiefly in the gymnasium and on the games field (36 to boys, 10 to girls).

The second highest number of accidents occurred in another newer bi-lateral school. Here the causes of the accidents were more varied, many of them happening on the staircase.

A technical school suffered the next highest number. Here they occurred chiefly during games in a small playground, often during playtime.

Several secondary schools reported *no* accidents. This is rather remarkable and suggests a sense of poise and control which may be somewhat lacking in other schools. It may also be due to fewer opportunities for vigorous games.

The following are the types of schools which were accident free:—

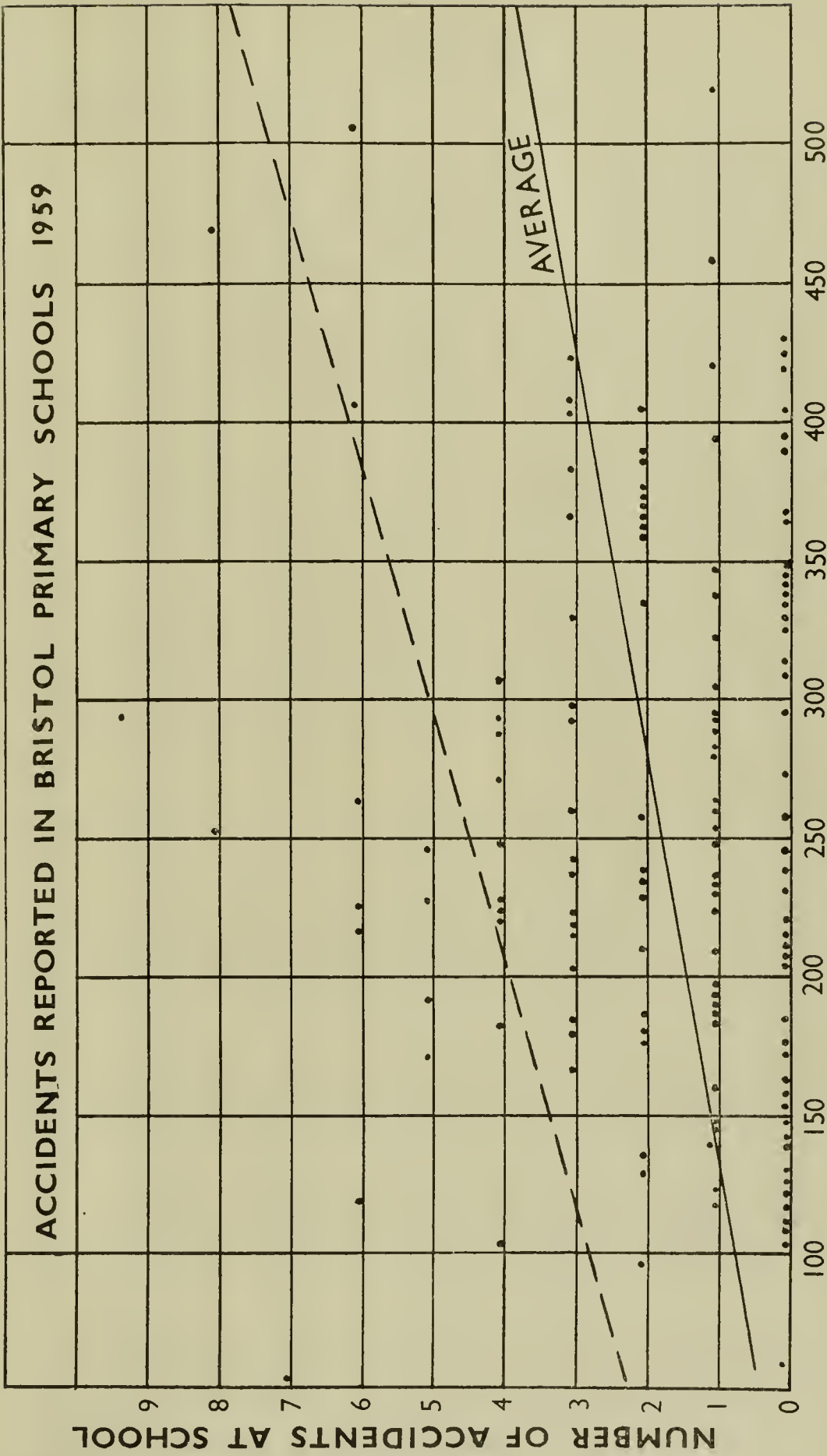
- 1 large mixed bi-lateral school with 751 pupils
- 3 secondary modern girls' schools of 551, 384, and 262 girls respectively
- 1 small mixed school with 165 children
- 1 bi-lateral girls' school with 683 girls, reported only one accident

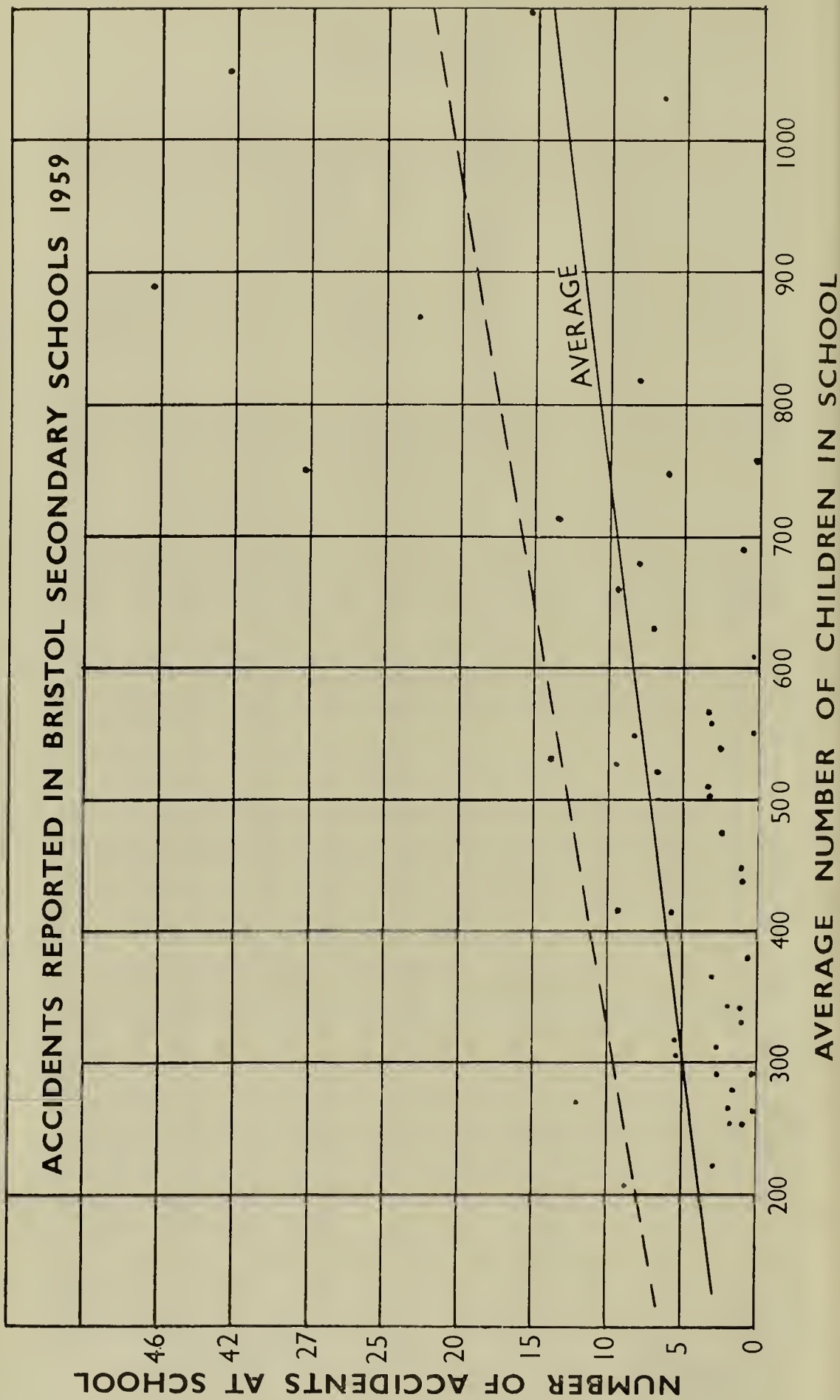
In the primary school graph, of the three schools with the highest number of accidents, two have very small playgrounds and injuries have consisted chiefly of bumps and bruises, and the third with a large playground has no climbing apparatus. Many of these accidents occurred in playtime.

In both graphs the continuous line shows the average accident rate. Schools appearing above the broken line can be considered to have a comparatively high accident rate for Bristol schools, although even the highest number in primary schools, *i.e.* 10 per year in a school of 300 children, can hardly be considered outstandingly high.

Accident Prone Children

Three children had two accidents in 1959, but none of these children appeared in the accident records for the years 1953-56.





APPENDIX B

Smoking by Young People

In view of the recently expressed medical opinion about the possible dangers to health from smoking, the question of smoking by older pupils in the schools and the ways in which the smoking habit might be discouraged was the subject of discussion early in the year with the Teachers' Consultative Committee. The Principal School Medical Officer suggested that a suitable letter should be made available for the Heads of secondary schools to send to the parents in cases where it was thought desirable, pointing out the potential danger to health from smoking. It was expected that many of the Heads of the schools would devise their own accompanying letter to reinforce the letter from the Principal School Medical Officer, but printed letters were made available for Heads who wished to use them. These letters were used in various ways in different schools. Some Heads sent the letters to all their pupils. Some confined the letters to certain children who had been detected smoking, and others adopted the method of sending the letters to their senior pupils only. It is of course quite impossible to ascertain the effect of the letters. Practically no reactions were observed from the parents, although one or two replies were received and certainly no widespread publicity was given to the measures taken. A feature of this might have been that at the time of the Committee approval of the letters there was a newspaper strike. It may be of course that this is a very cautious approach to this problem of discouraging any pupil from starting the smoking habit. It is known that some schools advocate tackling the subject much more vigorously than others. It is a little difficult to know what to do next, and it may be necessary to wait until the public generally are convinced of the undesirability of the smoking habit before fresh advice can be given to pupils in schools. The letters mentioned are produced herewith.

November, 1959.

Dear Parent,

SMOKING

As Medical Officer of Health it is my duty to write to parents about the potentially serious danger to health of smoking by young people. It has been suspected for many years that smoking is harmful to growing boys and girls and in adult life may cause and will certainly make worse, chronic bronchitis. Recent medical research, however, has shown that the danger is much worse than we thought and that the dread disease of lung cancer—which kills 17,000 men a year, in England and Wales—is far more likely to occur among heavy cigarette smokers.

Boys and girls cannot always realise the importance of these things, but we who are parents must obviously do all that we can to prevent our children starting the habit of smoking or, if they have started, to help them to break it. It is one that is very hard to break, and it takes so much money that could be spent on other things.

Many boys and girls regard smoking as a sign that they are "growing up": but trying to do well in games and sports, cycling, and taking a pride in personal appearance and physical fitness are much better ways of proving it.

Yours truly,

R. C. WOFINDEN,

Medical Officer of Health
and
Principal School Medical Officer.

CITY AND COUNTY OF BRISTOL—EDUCATION DEPARTMENT

.....School

November, 1959

Dear Parent,

I am particularly anxious to draw your attention to the attached letter from the Medical Officer of Health. I have been very distressed for some time that the habit of smoking is getting a grip on certain of the pupils at this school. Some pupils are smoking to such an extent that their fingers are stained brown with nicotine.

Dr. Wofinden's letter cannot be treated lightly as something that does not matter. It matters a great deal to the future health and happiness of your son or daughter that smoking should not be started until there can be a fuller understanding, as an adult, of what it may entail. If the habit has begun, it should be stopped as soon as possible.

Parental control of pocket money and the manner in which it is spent is one of the ways in which this practice can be dealt with. Anyone who sells cigarettes or tobacco to children under sixteen is breaking the law.

I should be very pleased to see any parent who is worried or is finding difficulty in this matter, and will co-operate in any way I can.

Yours sincerely,

APPENDIX C

Advice to Teachers on Infectious Diseases

During the year a review of the periods of exclusion from school of children suffering from, or contacts of, infectious disease, was undertaken and the following memorandum of advice was prepared for distribution to the Heads of schools.

A fresh memorandum on infectious diseases published by the Ministries of Health and Education, makes it desirable to issue this pamphlet of advice to teachers on the various infectious diseases of childhood.

The share of the teachers in the control of infectious disease amongst school children is of the highest importance. One of the ways in which infections can be spread among children is by contact in the schools. In many cases of infectious disease there is a period during which the symptoms are present and increasing in severity before the characteristic features of the disease are seen and the true nature of the complaint is known. During this stage there is a great possibility of infection being spread, both because the exact diagnosis is not known and because the organisms are multiplying in the throat, nose or bowel. During the height of the disease there is usually no problem because the child will, in a great majority of cases, be at home under the care of the private doctor. Mild cases may, however, be missed because the characteristic features of the disease are not obvious or may be present for only a short time. While recovering from an infectious disease children may continue to be infectious for longer or shorter periods and it is important for all concerned to be able to understand the problems involved at this stage. This aspect is dealt with later under the headings of individual diseases.

Exclusion of Children from School

The exclusion of children from school is enforced by the Head acting on behalf of the Local Education Authority or Managers or Governors of the school. In the ordinary course of events the person who makes the diagnosis is the local medical practitioner who will usually furnish a certificate as to the nature of the disease. Where there is no certificate supplied for inspection by the School Welfare Officer it is desirable for him to obtain information from the general practitioner or otherwise, in order to satisfy himself as to the nature of the disease causing the absence of the child from school. In some cases if the Head of the school has reason to suspect that a child is suffering from an infectious disease it is his duty to exclude the child from school provisionally until medical advice has been obtained. If, in such a case, the parents are known not to be at home, all possible steps should be taken to segregate the child from others until he can be returned to his home.

Further guidance about individual infectious diseases and the usual periods of exclusion of patients and contacts is given at the end of this pamphlet. In the case of apparent infectious disease showing unusual features, the Principal School Medical Officer would be grateful to receive information as soon as possible by telephone to the Central Health Clinic (Tel. No. 26602). In the presence of an epidemic the Principal School Medical Officer will advise the Heads of schools by circular letter of the principal characteristics of the disease and of the appropriate precautions to be taken. The co-operation and close liaison between the teacher, the school welfare officer, the health visitor and the general practitioner in charge of the case is of the utmost importance in the conduct and control of infectious disease.

Contacts of Infectious Disease

There has been, in recent years, a certain relaxation in the regulations which formerly used to be applied for the exclusion from school of home contacts of infectious disease. Our experience has shown that no untoward results have followed. In many diseases, the organisms are so widely disseminated that the exclusion of contacts would be of no effective value. The only diseases where it is still recommended that all contacts should be excluded from school are:—diphtheria, poliomyelitis and cerebro-spinal meningitis. Intestinal diseases present a separate problem and contacts may or may not be excluded according to the circumstances.

Action to be taken on particular diseases

Scarlet Fever: Nowadays scarlet fever is usually a mild disease although occasionally outbreaks of a more virulent type are seen. There is no reason, however, why in future it should not become virulent as it was, say, fifty years ago. At the commencement of the disease the organism produces a sore throat. After the rash occurs it is easily recognised as scarlet fever, but in the absence of a rash bacteriological examination is needed in order to ascertain with certainty the causative organism. In a patient with streptococcal sore throat without a rash, the infectivity is about the same as in a patient in whom a rash appears. Infectivity in patients occurs throughout the incubation period, through the course of the illness, and often for a considerable period afterwards. Children with a discharge from nose or ear, or a skin sore should be regarded as more likely to be infectious. Cases of scarlet fever and streptococcal sore throat should be allowed to return to school only on the production of a certificate from a general practitioner. Normally it is not necessary to exclude children who are contacts, but any adult contacts, who are engaged in the preparation of school meals, should be excluded until it is certified by the Medical Officer of Health that they may resume work.

Diphtheria: Diphtheria has now become very rare and it has not been seen in this City for the last few years. There is a possibility, however, that if the level of immunisation is not maintained the disease may return. It usually presents itself as a sore throat with no rash, or as a discharge from the nose. Special advice will be given to the Head of any school if a case of diphtheria arises. The best protection against diphtheria recurring, is a high level of resistance secured by continued immunisation.

Measles: Measles is tending to become a disease of children of school age. There is a highly infectious catarrhal stage before the typical rash is observed on about the third or fourth day of onset. The symptoms are often not unlike a heavy cold, with injection of the eyes and dislike of light. These symptoms in a child who has been in contact with a case of measles between 7—14 days previously should be viewed with suspicion. In such a case the child should be excluded until the diagnosis is confirmed or otherwise. There need be no exclusion of healthy contacts of this disease over the age of 5 years; under this age contacts should be excluded for 14 days unless they have had the disease.

German Measles (Rubella): This disease like measles often occurs in epidemics. Often the catarrhal symptoms are quite mild or may be absent before the rash is discovered. The symptoms are hardly ever severe and contacts need not be excluded from school.

Whooping Cough: The characteristic whoop usually occurs after anything up to a week of catarrhal symptoms, with a cough increasing in severity. The child's whoop is due to a spasmodic bronchitis which may continue for some

weeks and in fact in some cases the child may whoop with subsequent attacks of bronchitis for some months after the initial attack. This disease in its effects tends to be the most severe of the common infectious diseases. In the later stages of the disease the presence of a whoop does not necessarily indicate infectivity. The most infectious period is in the early stage of the disease, and begins before the whoop has developed. No exclusion of contacts of 5 and over is necessary but in the presence of an epidemic it is recommended that children under 5 should not be admitted to a nursery school or class unless they have already had the disease. Some protection is now possible by vaccination against whooping cough, and it is expected that in the future this will improve. A child who has been protected in this way, if he does not escape the disease altogether, will usually have the symptoms in a mild degree.

Mumps: Mumps is an infectious condition of a gland (parotid) which lies in front of, and below the ear. Early signs of the disease are often seen as a stiffness and swelling of the upper neck with a sore throat. There is no exclusion for contacts of this disease.

Chicken-Pox: The first sign of chicken-pox may be spots on the trunk or face and the catarrhal stage may not be very prominent. This disease is very infectious in the early stages but its infectivity may well have gone before all the scabs have dropped off. There is no need to exclude contacts of this disease.

Influenza and the Common Cold: It is almost impossible in most instances to distinguish these two conditions from each other. In the presence of an epidemic of influenza special advice will be issued. In general, influenza is more likely if there are generalized aches and pains with constitutional upset, and the common cold is more likely if the symptoms are of a local character affecting the nose or throat. Usually, especially in schools with younger children, it is desirable to advise exclusion for one or two days at the start of any coryzal symptoms. If there are the more severe symptoms of influenza, absence for a week is recommended, or until recovery is complete.

Tuberculosis: Pulmonary tuberculosis in the form in which it is seen in adults is rarely seen in children of school age. There is, nowadays, a system of close follow up of known cases of tuberculosis and their families and it is not likely that teachers will be concerned in the recognition of this disease. Special measures will be taken by the Principal School Medical Officer where a case of tuberculosis is known to have occurred in a school. B.C.G. vaccination of older children is a valuable preventive measure.

Smallpox: This nowadays is such a rare disease that special advice will be given if there is a possibility of it occurring in the City.

Poliomyelitis: This disease usually shows itself as an acute feverish illness often with headache and stiffness of the neck, sometimes followed by the characteristic paralysis of one or more groups of muscles. In a considerable number of cases no paralysis results. Home contacts of a case must be excluded for three weeks from the date of onset of the disease. It is recommended that children should not be admitted for the first time to schools during the course of an epidemic of this disease, but in this event the Principal School Medical Officer will advise on the need for such a measure. Special advice would be given to Heads of schools where a number of cases occur in one area. Where

children are noticed to have developed a limp or other evidence of paralysis after a febrile illness the Principal School Medical Officer should immediately be notified.

Cerebro Spinal Meningitis: This is an acute infection of sudden onset with fever, headache, vomiting and stiffness of head and back. Home contacts should be excluded for three weeks from the date of onset of the disease.

Dysentery: Most cases of dysentery present themselves as cases of diarrhoea or vomiting. There may be little or no fever.

The mild type of dysentery (Sonne) has been endemic in this City for some years and periodically it occurs in epidemic form. The most important protective measure is scrupulous attention to personal hygiene, especially washing of the hands after defaecation. Notified cases of dysentery are investigated by the Public Health Inspectors and the Head will be advised as to the action to be taken about the exclusion of a child from school.

A certificate from the general practitioner or from the Principal School Medical Officer will be signed when the child is fit to return to school. Children who have passed the acute phase of this disease while appearing to be well may continue to be infectious for some time.

Members of School Meals staffs and children under 5 who are home contacts of a case of dysentery should be excluded from school until a certificate of fitness to return to school is given by the Medical Officer of Health or by the general practitioner.

Home contacts of cases of dysentery who are over the age of 5 years will be investigated by the Public Health Staff and advice will be given about the necessity for exclusion from school where necessary, *e.g.* (School Meals staff).

Food Poisoning: Food poisoning may present a very similar picture to the foregoing and similar action will be taken. In the case of a local outbreak of food poisoning action will be taken by the Principal School Medical Officer in conjunction with the Public Health Department. If there are cases of suspected food poisoning in the school the Head should promptly notify by telephone the Principal School Medical Officer at the Central Clinic (Tel. 26602) and the Chief Education Officer (Special Services Dept.) at the Council House, College Green (Tel. 26031, ext. 267).

Typhoid and Paratyphoid Fever: Typhoid and paratyphoid fever are rare in this country and special advice will be issued in the presence of an outbreak. Cases of this disease are usually seen as diarrhoea and constitutional upset.

Occasional epidemics of diarrhoea and vomiting due to other infectious agents occur. The Principal School Medical Officer should be advised of any such outbreaks.

Infectious jaundice may be preceded by the same sort of symptoms and the Principal School Medical Officer should be notified in such cases also.

Contagious infections of the skin and allied tissues

Ringworm: All children thought to be suffering from this condition should be referred to the School Medical Officer at the local clinic. He will advise about treatment and continuation of school attendance. The same action should be taken in cases of suspected ringworm of the body and athlete's foot. A close watch should be kept for these conditions and also for plantar warts.

Children showing signs of any other infectious condition such as conjunctivitis, impetigo, etc., should also be referred to the local clinic for advice.

Exclusion from school of members of school staffs including caretakers

Pulmonary Tuberculosis: This condition would cause immediate exclusion from duty of teachers and other staff and certain conditions as to treatment must be observed. The Principal School Medical Officer will certify fitness to resume duty of any members of school staffs who have been absent because of tuberculosis. The principal means of combating the spread of this disease is the yearly chest X-ray and teachers are recommended to take advantage of the facilities that are offered for this to be done. All other persons in schools who come into contact with children in the course of their duties are advised to take similar steps. In the case of members of the school meals staff, arrangements are made for a yearly medical examination including X-ray of the chest.

Other infectious diseases: The following diseases should cause immediate suspension from duty of any members of the school meals staff suffering therefrom:—alimentary infections, vomiting and/or diarrhoea including enteric fever, dysentery and food poisoning and septic infections of the hands, forearms or face. The Principal School Medical Officer will certify fitness to resume duty in such cases. Members of school meals staff suffering from other infectious conditions or becoming home contacts will be dealt with in the same way as children in similar circumstances.

Staff other than school meals staff: Where other members of staff employed in schools contract a communicable disease or become home contacts they will have applied to them the same rules regarding exclusion as are applied to school children in like circumstances. In cases of doubt about any infectious disease the advice of the Principal School Medical Officer should be sought at the Central Clinic, Tower Hill, Tel. No. 26602.

R. C. WOFINDEN,

Principal School Medical Officer
and Medical Officer of Health.

Periods of exclusion from School for Infectious Diseases

		PERIOD OF EXCLUSION		CONTACTS, i.e. the other members of the family or household living together as a family, that is, in one tenement
		PATIENTS		
Usual incubation period (days)	Interval between onset and appearance of rash (days)			
SCARLET FEVER (and streptococcal sore throat)	2—5	1—2	7 days after discharge from hospital or from home isolation. (Unless "cold in the head", discharge from the nose or ear, sore throat, or septic spots be present).	Children—no exclusion. Persons engaged in the preparation or service of school meals to be excluded until Medical Officer of Health certifies that they may resume work.
DIPHTHERIA	2—5	—	Until pronounced by a medical practitioner to be fit and free from infection.	At least 7 days. Return to school should not be permitted until bacteriological examination has proved negative.
MEASLES	10—15	3—4	10 days after the appearance of the rash if child appears well.	Children under 5 years of age should be excluded for 14 days from the date of appearance of the rash in the last case in the house. Other contacts can attend school. Any contact suffering from a cough, cold, chill or red eyes should immediately be excluded. A child who is known with certainty to have had the disease need not be excluded.
GERMAN MEASLES	14—21	0—2	7 days from the appearance of the rash.	None.

PERIOD OF EXCLUSION

CONTACTS, i.e. the other members of the family or household living together as a family, that is, in one tenement

PATIENTS

Interval between onset and appearance of rash (days)

Usual incubation period (days)

Cont.

WHOOPIING COUGH	..	7—10	—	28 days from the beginning of the characteristic cough.	Healthy contacts of 5 or over — no exclusion. Children under 5 years of age should be excluded for 21 days from the date of onset of the disease in the last case in the house. A child who is known with certainty to have had the disease need not be excluded.
MUMPS	..	12—28	—	7 days from the subsidence of all swelling.	None.
CHICKEN POX	..	11—21	0—2	14 days from the date of appearance of the rash.	None.
POLIOMYELITIS	..	7—14	—	At least 6 weeks.	} At least 21 days.
ENCEPHALITIS	..	4—30	—	Will usually require a much longer period for recovery.	
MENINGOCOCCAL INFECTION	..	2—10	—		

R. C. WOFINDEN,

Principal School Medical Officer,
and Medical Officer of Health.

STATISTICAL TABLES
YEAR ENDED 31st DECEMBER, 1959

PART I—MEDICAL INSPECTION OF PUPILS ATTENDING MAINTAINED
PRIMARY AND SECONDARY SCHOOLS (INCLUDING NURSERY AND
SPECIAL SCHOOLS)

TABLE A.—PERIODIC MEDICAL INSPECTIONS

<i>Age Groups Inspected (By year of birth)</i>	<i>No. of Pupils Inspected</i>	<i>Physical Conditions of Pupils Inspected</i>			
		<i>Satisfactory</i>		<i>Unsatisfactory</i>	
(1)	(2)	No. (3)	% of Col. 2 (4)	No. (5)	% of Col. 2 (6)
1955 and later	1,017	999	98.2	18	1.8
1954	1,027	988	96.2	39	3.8
1953	3,707	3,540	95.5	167	4.5
1952	1,117	1,082	96.9	35	3.1
1951	410	385	93.9	25	6.1
1950	836	798	95.5	38	4.5
1949	977	946	96.8	31	3.2
1948	918	888	96.7	30	3.3
1947	1,390	1,355	97.5	35	2.5
1946	730	710	97.3	20	2.7
1945	1,514	1,479	97.7	35	2.3
1944 and earlier	5,887	5,790	98.4	97	1.6
TOTAL	19,530	18,960	97.1	570	2.9

TABLE B.—PUPILS FOUND TO REQUIRE TREATMENT AT PERIODIC
MEDICAL INSPECTIONS (excluding Dental Diseases and Infestation with
Vermin)

<i>Age Groups Inspected (By year of birth)</i>				<i>For defective vision (excluding squint)</i>	<i>For any of the other conditions recorded in Part II</i>	<i>Total indivi- dual pupils</i>
(1)				(2)	(3)	(4)
1955 and later	..	..	..	2	84	85
1954	..	..	..	6	127	132
1953	..	..	..	37	603	626
1952	..	..	..	30	169	192
1951	..	..	..	10	57	66
1950	..	..	..	31	112	131
1949	..	..	..	40	111	147
1948	..	..	..	86	126	198
1947	..	..	..	121	202	305
1946	..	..	..	97	106	195
1945	..	..	..	139	129	247
1944 and earlier	..	..	..	539	558	1,013
TOTAL	..	..	..	1,138	2,384	3,337

TABLE C.—OTHER INSPECTIONS

Number of Special Inspections	..	..	..	..	17,914
Number of Re-inspections	..	..	..	..	26,238
Total	..	..	..	..	44,152

TABLE D.—INFESTATION WITH VERMIN

(a) Total number of individual examinations of pupils in schools by school nurses or other authorised persons	..	..	..	..	104,429
(b) Total number of individual pupils found to be infested	..	..	..	..	1,278
(c) Number of individual pupils in respect of whom cleansing notices were issued (Section 54 (2), Education Act, 1944)	..	..	..	..	216
(d) Number of individual pupils in respect of whom cleansing orders were issued (Section 54 (3), Education Act, 1944)	..	..	..	..	32

PART II—DEFECTS FOUND BY MEDICAL INSPECTION DURING THE YEAR

TABLE A.—PERIODIC INSPECTIONS

<i>Defect or Disease</i>	<i>Entrants</i>		<i>Periodic Inspections</i>				<i>Total</i>	
	<i>(T)</i>	<i>(O)</i>	<i>Leavers</i> <i>(T)</i>	<i>(O)</i>	<i>Others</i> <i>(T)</i>	<i>(O)</i>	<i>(T)</i>	<i>(O)</i>
Skin	79	21	206	4	126	19	411	44
Eyes—(a) Vision	71	33	630	21	437	67	1,138	121
(b) Squint	90	28	20	2	45	7	155	37
(c) Other	20	8	19	2	17	—	56	10
Ears—(a) Hearing	56	20	25	2	34	14	115	36
(b) Otitis Media	47	14	23	3	27	13	97	30
(c) Other	7	2	13	1	4	2	24	5
Nose and Throat	421	191	98	8	116	47	635	246
Speech	37	79	4	—	14	7	55	86
Lymphatic Glands	76	88	4	1	19	19	99	108
Heart	34	18	38	11	28	21	100	50
Lungs	104	72	43	38	64	44	211	154
Developmental—								
(a) Hernia	12	10	2	—	11	3	25	13
(b) Other	13	74	17	16	32	42	62	132
Orthopaedic—								
(a) Posture	12	12	27	5	24	15	63	32
(b) Feet	24	20	18	—	38	7	80	27
(c) Other	41	47	63	11	57	27	161	85
Nervous System—								
(a) Epilepsy	8	8	28	1	25	3	61	12
(b) Other	6	10	9	1	9	9	24	20
Psychological—								
(a) Development	18	17	6	—	13	6	37	23
(b) Stability	51	39	6	1	28	28	85	68
Abdomen	8	3	10	2	3	—	21	5
Other	33	71	67	14	50	57	150	142

(T)=Treatment. (O)=Observation.

TABLE B.—SPECIAL INSPECTIONS

<i>Defect or Disease</i>	<i>Special Inspections</i>	
	<i>Pupils req.</i> <i>Treatment</i>	<i>Pupils req.</i> <i>Observation</i>
Skin	3,080	35
Eyes—(a) Vision	1,052	118
(b) Squint	77	15
(c) Other	447	18
Ears—(a) Hearing	121	16
(b) Otitis Media	93	13
(c) Other	203	7
Nose and Throat	509	101
Speech	73	33
Lymphatic Glands	60	39
Heart	29	27
Lungs	83	55
Developmental—		
(a) Hernia	12	5
(b) Other	35	60
Orthopaedic—		
(a) Posture	37	25
(b) Feet	78	28
(c) Other	162	37
Nervous System—		
(a) Epilepsy	15	5
(b) Other	22	14
Psychological—		
(a) Development	27	44
(b) Stability	65	35
Abdomen	18	5
Other	4,720	108

**PART III—TREATMENT OF PUPILS ATTENDING MAINTAINED
PRIMARY AND SECONDARY SCHOOLS (INCLUDING NURSERY
AND SPECIAL SCHOOLS)**

TABLE A.—EYE DISEASES, DEFECTIVE VISION AND SQUINT

	<i>Number of cases known to have been dealt with</i>
External and other, excluding errors of refraction and squint	1,291
Errors of refraction (including squint)	5,181
TOTAL	<hr/> 6,472
Number of pupils for whom spectacles were prescribed	2,291

TABLE B.—DISEASES AND DEFECTS OF EAR, NOSE AND THROAT

	<i>Number of cases known to have been dealt with</i>
Received operative treatment—	
(a) for diseases of the ear	51
(b) for adenoids and chronic tonsillitis	1,770
(c) for other nose and throat conditions	236
Received other forms of treatment	902
TOTAL	<hr/> 2,959
Total number of pupils in schools who are known to have been provided with hearing aids—	
(a) in 1959	28
(b) in previous years	95

TABLE C.—ORTHOPAEDIC AND POSTURAL DEFECTS

	<i>Number of cases known to have been treated</i>
(a) Pupils treated at clinics or out-patients departments	422
(b) Pupils treated at school for postural defects	—
TOTAL	<hr/> 422

**TABLE D.—DISEASES OF THE SKIN
(excluding uncleanness)**

	<i>Number of cases known to have been treated</i>
Ringworm—(a) Scalp	1
(b) Body	218
Scabies	44
Impetigo	162
Other skin diseases	3,253
TOTAL	<hr/> 3,678

TABLE E.—CHILD GUIDANCE TREATMENT

	<i>Number of cases known to have been treated</i>
Pupils treated at Child Guidance Clinics	314

TABLE F.—SPEECH THERAPY

	<i>Number of cases known to have been treated</i>
Pupils treated by speech therapists	255

TABLE G.—OTHER TREATMENT GIVEN

							<i>Number of cases known to have been dealt with</i>
(a)	Pupils with minor ailments	..	..	..	..	..	11,203
(b)	Pupils who received convalescent treatment under School Health Service arrangements	..	..	..	..	..	38
(c)	Pupils who received B.C.G. vaccination	..	..	..	..	..	3,647
(d)	Other than (a), (b) and (c) above						
	Chiropody	..	..	..	..	..	629
	U.V.L.	..	..	..	..	..	65
	Enuresis Clinic	..	..	..	..	..	207
	Asthma	..	..	..	..	..	73
	T.B. Contacts	..	..	..	..	..	670
	TOTAL (a)—(d)	..					16,532

PART IV—DENTAL INSPECTION AND TREATMENT CARRIED OUT BY THE AUTHORITY

(1)	Number of pupils inspected by the Authority's Dental Officers:—						
	(a) At Periodic Inspections	..	47,204				
	(b) As Specials	..	4,227				
				..	Total (1)		51,431
(2)	Number found to require treatment	..	..	..	..	..	34,066
(3)	Number offered treatment	..	..	..	..	..	29,357
(4)	Number actually treated	..	..	..	..	..	18,140
(5)	Number of attendances made by pupils for treatment, including those recorded at 11 (h)	..	..	..	..	..	46,083
(6)	Half days devoted to:						
	(a) Periodic (School) Inspection		345				
	(b) Treatment	..	*5,293		Total (6)		5,638
(7)	Fillings:						
	(a) Permanent Teeth	..	20,441				
	(b) Temporary Teeth	..	4,613		Total (7)		25,054
(8)	Number of Teeth filled:						
	(a) Permanent Teeth	..	18,915				
	(b) Temporary Teeth	..	4,397		Total (8)		23,312
(9)	Extractions:						
	(a) Permanent Teeth	..	6,059				
	(b) Temporary Teeth	..	17,720		Total (9)		23,779
(10)	Administration of general anaesthetics for extraction	..	..				9,475
(11)	Orthodontics:						
	(a) Cases commenced during the year	..	..	..	..	..	514
	(b) Cases brought forward from previous year	..	..	..	..	..	250
	(c) Cases completed during the year	..	..	..	..	..	41
	(d) Cases discontinued during the year	..	..	..	..	..	—
	(e) Pupils treated with appliances	..	..	..	..	..	—
	(f) Removable appliances fitted	..	..	..	..	..	—
	(g) Fixed appliances fitted	..	..	..	..	..	—
	(h) Total attendances	..	..	..	..	..	1,238
(12)	Number of pupils supplied with artificial teeth	..	..	..	..	..	107
(13)	Other operations:						
	(a) Permanent Teeth	..	13,122				
	(b) Temporary Teeth	..	6,507		Total (13)		19,629

* In addition 385 sessions to mothers and young children were given.

The figures given under (11) Orthodontics refer to work done at the diagnostic clinic held at the Authority's Central Clinic. Children requiring treatment with appliances are referred to the Bristol Dental Hospital for further treatment and provision of the necessary appliances. The cases completed (c) are those that were dealt with at the clinic by extractions.

SCHOOL CLINICS

<i>1958 No. of attend- ances</i>		<i>Work</i>	<i>1959 No. of attend- ances</i>
32,780	Central Health Clinic	Inspection clinic; treatment of minor ailments; ear, nose and throat clinic; dental treatment; orthodontic treatment; oral hygienist; refraction clinic; asthma clinic; enuretic clinic; T.B. contact clinic; treatment of scabies cases; orthopaedic clinic; remedial exercises; electrical treatment; physiotherapy, massage and foot treatment; artificial sunlight treatment ..	31,589
7,520	Brooklea Clinic	Inspection clinic; treatment of minor ailments	4,998
15,658	Bedminster Health Clinic	Inspection clinic; treatment of minor ailments; ear, nose and throat clinic, dental treatment; and refraction clinic ..	14,736
581	William Budd Health Centre	Inspection clinic; treatment of minor ailments	411
3,716	Granby House Clinic	Inspection clinic; treatment of minor ailments	3,687
1,551	Lawrence Weston Clinic	Inspection clinic; treatment of minor ailments; dental treatment	1,466
9,312	Knowle Health Clinic	Inspection clinic; treatment of minor ailments; dental treatment	9,248
14,737	Speedwell Health Clinic	Inspection clinic; treatment of minor ailments; ear, nose and throat clinic; dental treatment and refraction clinic ..	14,185
2,161	Verrier Road Clinic	Treatment of minor ailments	1,979
13,695	Portway Clinic	Inspection clinic; treatment of minor ailments; ear, nose and throat clinic; dental treatment and refraction clinic ..	10,169
20,236	Southmead Clinic	Inspection clinic; treatment of minor ailments; ear, nose and throat clinic; dental treatment and refraction clinic ..	18,860
7,771	Charlotte Keel Clinic	Inspection clinic; treatment of minor ailments; dental treatment	8,454
7,177	Mary Hennessy Clinic	Inspection clinic; treatment of minor ailments; dental treatment	8,592
1,063	John Milton Clinic	Inspection clinic; treatment of minor ailments; dental treatment	3,901
13,776	Connaught Road School Clinic	Treatment of minor ailments	13,372
383	Day E.S.N. Special Schools	Treatment of minor ailments	305
10,956	Novers Open Air School	Remedial exercises and massage; treatment of minor ailments	11,269
707	Cardio-Rheumatic Clinic	Cases of heart disease and rheumatic disease	667
2,637	Child Guidance Clinic	.. .. .	2,630
3,748	Speech Clinics .. .. .	.. .. .	5,160
1,556	Dental Hospital	.. .. .	1,361
<hr/> 171,721	Total Attendances	.. .. .	<hr/>167,039

